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A New Trajan

GEORGE M. A. HANFMANN AND
CORNELIUS C. VERMEULE

with contributions by
WILLIAM J. YOUNG AND HANS JUCKER

PLATES 68-75

I. Description

GEORGE M. A. HANFMANN

In April 1954 the Fogg Museum purchased a marble statue of Trajan. Such information as was volunteered by the seller, Mr. R. Forrer of Spink and Son, Ltd., London, indicates that it was "bought from a country dealer at Whitchurch, Hampshire." C. C. Vermeule conjectures that this may be the statue first mentioned by Th. Pennant, *The Journey from Chester to London* (London 1782), p. 68: "It is difficult to enumerate the works of art dispersed over this Elysium"—to wit, Shugborough, the estate of Thomas Anson. "Among the great number of statues which embellish the place . . . there is a very fine figure of Trajan in the attitude of haranguing his army." Subsequently, A. Michaelis heard of it as being at Birmingham.¹ For the present, the interesting possibility that the statue was brought to England in the eighteenth century must remain unproved. There can be no doubt, however, that it was subjected to the not so tender mercies of early restorers and exposed for a considerable length of time to the inclemencies of the British weather.

Description: Accession number 1954.71. Fogg Art Museum Harvard University, *Annual Report* 1953-54, 6f, photo of front; *Art Quarterly* 18:2 (Summer 1955) photo p. 197:1. The statue (pls. 68-70, figs. 1-4) is made of marble and is slightly over life-size. H. with plinth, 1.91 m. (6'3"), of figure alone, 1.815 m. The emperor is shown in the "Polykleitan" stance, with his head turned somewhat to his right.

¹ *Ancient Marbles in Great Britain* (1882) n. 174, at Lord Anson, Shugborough, Staffordshire; but p. 213, Birmingham: "Mr. Newton informs me that Mr. J. A. Crane owns two statues which formerly belonged to the Anson Collection. . . 1. Trajan . . ." Cf. C. C. Vermeule, *AJA* 59 (1955) 130.

² In a letter of April 6, 1954.

³ Trajan's cuirass statue from Ostia, pl. 73, fig. 14 and IV,

To determine exactly the state of preservation is no simple matter. The results of several scientific tests are reported in the Appendix (III) by William J. Young. Other tests and the cleaning of the statue were undertaken by Elizabeth H. Jones and J. Washeba of the Department of Conservation, Fogg Art Museum.

Petrographic tests reveal that with one exception (part of the right foot) *all* parts of the statue are made of second grade Carrara marble. Weathering is marked on all ancient parts. In a number of places it has led to decomposition of the surface and exposure of oblique ridges of calcite, as in the tips of the "skirt," some spots on the cuirass, and on the left knee. Furthermore, as W. J. Young, remarks in his interpretation of the ultra-violet test, the statue has been reworked and artificially patinated in numerous places.

In what follows I am expressing my personal opinions on the state of preservation.

Since Roman statues more often than not have lost their original heads, the first and crucial question is whether the head belongs. B. Ashmole thought that it does.² Scientific tests show the head to be of the same marble as the body; and it has weathered in a similar way. To be sure, the head looks somewhat small in relation to the body but a survey of cuirass statues with demonstrably authentic heads³ will show that the Fogg Trajan is

no. 1, *infra*. R. Calza, *Museo Ostiense* (1947) 8, no. 23. G. Calza, *Le Arti* 1 (1938-9), 388ff, pl. 120:2. *AA* 55 (1940) 435, fig. 14. Herbert Bloch kindly states that "the statue of Trajan was found in 1938 in the building called Schola del Traiano (after the statue) on the Decumanus Maximus (Reg. IV, Ia. V, 15). This building is opposite the temple of the Fabri Navales, one of the most important *corpora* in Ostia. I believe that the

by no means the worst proportioned among them.

Not all of the head of the Fogg statue is antique. The back of the head from top to nape is restored of grayish, weathered marble (figs. 2a, 3, 4, 7). The neck has been broken (figs. 2a, 5, 6, 7). It is impossible to be sure whether the lower part of the neck is original or restored. The marble above and below the break looks similar, and after removal of cement which fills the areas around the neck, the lower edge of the neck was seen to be carefully cut, not broken. This could not be the case if head and body were worked in one piece.⁴ In any case, this area had been previously damaged, for the entire right shoulder right up to the middle of the nape is restored. This is very clearly visible from the back. In front, the break runs just a bit below the top of the shoulder. A small piece of the cuirass above and to the left of the Gorgoneion is likewise restored (pls. 71, 72, figs. 6, 8). Modern are also the right upper arm and the front piece of the left lower arm (figs. 1, 4).

In describing the lower part of the statue it is advisable to state first which parts are definitely original. The support at the right leg, the right leg, the left leg to the upper knee, and the upper part of the garment slung over the left arm are all carved of one piece with the body. The restorer has pared down the support, which was perhaps originally a tree trunk, and has made it into an octagonal (seven facets are visible) pillar. To strengthen it, he set into the surface two vertical iron splines, covering them and a number of other cracks with cement. He then carved out of one piece of marble an entire new base, together with the left foot and the small support for the pendent garment. Into this base he carefully bedded the back of the right foot and the adjoining support and fastened the support with an iron dowel driven in through the bottom of the base. He then made separately the new front part of the right foot.⁵ This modern base cracked in front, but the crack does not extend far into the stone. Here, I must point out that

W. J. Young is inclined to accept the base and the parts connected with it as ancient, though reworked (cf. *infra*).

As may be readily seen in plate 70, figure 3, two dark areas seem to mark two restorations; one is the lower part of the garment which falls from the shoulder and the other comprises the left calf and a piece of garment joined to it by a short strut. The former is cemented to an iron bar rammed in below the cloak at Trajan's left shoulder. The piece is of marble which shows some elements not present in the original pieces and one might argue that its workmanship does not jibe with that of the piece above.

The other dark piece, however, is apparently not modern. Where the surface of the marble is preserved (fig. 1, inner calf of left leg) it appears identical with the marble of the torso. Apparently, this piece as well as the lower part of the left knee had broken off and had weathered differently from the head and torso. The restorer went to considerable trouble in fitting this fragment between the preserved parts of the statue and his newly made base and support, something he would hardly have done if he did not consider them original.

Other evidence of the restorer's activities is found in a series of small iron dowels which are used for "piecing" and held restorations now lost—such as the back parts of the ears, the tip of the nose, and apparently additional ridges on the folds of the flaps of the cuirass and the chiton. C. C. Vermeule informs me that iron dowels are typical of eighteenth century repairs and are paralleled in numerous ancient marbles imported into England in the times of Gavin Hamilton and Cavaceppi. Two leather tabs of the cuirass over the left buttock are recent. Lime cement is applied very liberally to all breaks and joins; plaster and pigment are used to make them unobtrusive. No evidence of coloring survives.⁶

Only conjectures can be offered about the attributes and the position of the right arm. The left

Schola del Traiano was the property of one of the *collegia* or *corporis* of Ostia. No evidence pertaining to its occupants was found, however. It was built about the middle of the second century. Cf. Calza, Becatti, Gismondi, De Angelis d'Ossat, Bloch, *Scavi di Ostia*, I (1953) 146, 226f, 237." W. H. Gross, *Bildnisse Trajans* (1940) pl. 3. M. Wegner, *Die Herrscherbildnisse in antoninischer Zeit* (1939) 127, 167, pls. 5 (Antoninus) 17 (Marcus). A. Hekler, *JÖAI* 19-20 (1919) 212, fig. 140. G. Mancini, *BC* 50 (1922) pl. 13 (M. Holconius Rufus).

⁴ Heads with necks were frequently carved separately and

inserted into bodies, but I doubt that this was true of the Fogg Trajan. I assume that here and in his repair of the right shoulder the restorer cut down the original surfaces of the breaks where they did not make a perfect join.

⁵ The right leg is broken at ankle; the ancient part continues to mid-foot.

⁶ Such as exists for the statue of Augustus from Prima Porta. Sieveking suggests that cuirass statues were thoroughly polychromed and "offered a phantastic symphony of colors to the eye." *BWPr* 91 (1931) 12.

arm, bent at a marked angle, may have held the short sword or *parazonium*, a victory,⁷ or a sceptre, as does the Augustus of Prima Porta.⁸ The position of the right arm is uncertain. The restorer envisaged it as bent downward, an arrangement not unknown in cuirass statues.⁹ The more customary type, however, shows the right arm raised, either in address, as in the Augustus of Prima Porta,¹⁰ or holding a spear, as in Trajan's own statue from Ostia¹¹ (pl. 73, fig. 14). There are no traces of a spear either on the original fragment of the plinth or on the pillar alongside the right leg.¹² The "Prima Porta" gesture is perhaps the more plausible assumption, since the Fogg Trajan follows that type in the general composition.

The emperor wears a short girt tunic (*tunica*) the folds of which appear (figs. 1-4) below the leather tabs of the cuirass; the short left sleeve, too, is clearly rendered below the shoulder tabs of the cuirass. This is a garment worn by Greek and Roman warriors alike.¹³ The metal part of Trajan's Roman¹⁴ "body" or "muscle" cuirass is well-shaped. Pectoral and external oblique abdominal muscles are raised; the sternum and the spine are hollowed (figs. 2, 3). The join of the two halves of the cuirass at the sides is clearly indicated as is the lower edge of the metal part, where the bronze sheet was hammered around a wire (figs. 2, 4). The upper edge is a simple ridge. The raised decoration of the cuirass is discussed in the second part of this article.

The two rows of decorated lappets, *pteryges*, are

perhaps envisaged as suspended from a leather band attached to the cuirass. As the drawing (pl. 74, fig. 9) shows,^{14a} the upper *pteryges* are set in metal frames linked by adjustable hooks which permit the *pteryges* to yield to the motion of the body (as in fig. 3). It is impossible to be sure if the material represented is leather or thin bronze. The few extant examples of actual *pteryges* are of bronze.¹⁵ The total number of *pteryges* in the upper row must be accounted as 17, of which 16 are visible. Above the upper *pteryges* are alternating lotuses and palmettes—a good classical motif. A somewhat irregular sequence of simple and "flaming" palmettes and bull skulls decorates the upper *pteryges*. A notable exception is the lion-headed griffin¹⁶ in one of the *pteryges* on the back. The visible portions of lower *pteryges* had alternating rosettes and palmettes.

Leather lining was presumably worn under the metal cuirass. To this lining were attached the fringed shoulder tabs preserved on the left shoulder (figs. 2, 4), and the skirt-like array of long fringed leather tabs which issue from below the ornamented *pteryges*.

The Imperial military cloak, *paludamentum*, has been folded lengthwise. One end is thrown from the left shoulder over the back; the garment doubles back in the curving pile over the shoulder to encircle the left arm and to descend in the motif made famous by Praxitelean statues and beloved by Roman copyists.¹⁷

Some cuirass statues followed mythological stat-
56ff.

⁷ Cf. the coin of Trajan, fig. 20. W. H. Gross, *op.cit.* 22, 57, pl. 441, considers that the cuirass statue in Copenhagen may have held either a sword or a victory. Wegner, *op.cit.* pl. 17 (Marcus). Hekler, *op.cit.* 226, fig. 152, Epidauros, "Hadrianic," with similar arrangement of draperies.

⁸ *CAH* Vol. of Plates 4 (1934) 148a; also the Claudius cameo, 158d.

⁹ Gross, *op.cit.* no. 52, pl. 3a=fig. 12, Trajan, Copenhagen. Wegner, *op.cit.* pl. 17b (Marcus). Hekler, *op.cit.* fig. 7, torso Nola. Cf. also the base of Civitella Castellana, "Mars Victor," C. C. Vermeule, *NumCirc* (July-Aug. 1955) fig. 3; R. Herbig, *RM* 42 (1927) 129ff.

¹⁰ *CAH* Vol. of Plates 4 (1934) 148a. The cuirass torso from Aidin suggests a similar posture. Hekler, *op.cit.* 240, fig. 168. "Trajanic?" *Adlocutio* scenes of Trajan's column provide instructive comparisons. P. G. Hamberg, *Studies in Roman Imperial Art* (1945) 135ff, pls. 22f.

¹¹ Ostia, note 3. Coins: fig. 20. Gross, *op.cit.* pls. 441, 45b. *CAH*, Vol. of Plates 4 (1934) 136b. I. S. Ryberg, *MAAR* 22 (1955) 92, fig. 42b.

¹² Antoninus Pius, Dresden, Wegner, *op.cit.* 127, pl. 5. Cf. also the part of the spear on the support of a heroic nude statue found in Ostia.

¹³ L. M. Wilson, *The Clothing of the Ancient Romans* (1938)

¹⁴ A. Hekler, *JOAI* 19-20 (1919) 308ff. Cf. F. Muthmann, *Statuenstützen und dekoratives Beiwerk-Abh. Heid*, Phil. Hist. 1950:3 (1951) 61ff.

^{14a} The drawing, made by Miss Regina Gittes, shows all details that can be reconstructed with assurance from indications on the statue. Dotted lines indicate two hypothetical flaps under the cloak on Trajan's left side.

¹⁵ A. Hagemann, *Griechische Panzerung* (1919) 54f, nos. 24-26. Hekler, *op.cit.* 209, fig. 136. They have been dated Augustan (Hekler) or Hadrianic (Sieveking, *BWPr* 91 [1931] 11). Hagemann, *op.cit.* 75, 77f discusses the Greek references to *pteryges*; the authors make no distinction between the ornamented lappets and the longer straps or tabs of the leather "skirt." Cf. also n. 48.

¹⁶ Although heads of this general type are common in cuirass ornament (e.g. *Einzelstudien*, no. 3289), the occurrence of a single lion-griffin is unusual. The rosettes and palmettes are similar to those on a complete statue in Parma which has been identified as Otho, but on the analogy of the Cancellaria reliefs might be Domitian recut as Nerva. Cf. L. Curtius *RM* 47 (1932) 242ff, fig. 17, pl. 66f. H. Götze, *MdI* (1948) 139ff, pls. 46, 52:2 (CCV).

¹⁷ Hermes-Kleomenes, note 70. Very frequent in cuirass

ues in being barefooted.¹⁸ Others had fancy shoe work. Trajan wears a modified type of sandal. They consist of a thick sole with a strap across the toes; three or five vertical straps link the sole to a sort of legging—leather bands wound around the ankle and apparently tied in front.¹⁹ This footwear is worn by Greeks as well as Romans.²⁰

Finally, a word about the supports. Although the large support is recut and the smaller possibly a restoration, their placing may well be correct.²¹ A heavy tree-trunk on the right and a more elegant support for the garment falling from the left arm would result in a stronger contrast between the two halves of the body. Such may have been their original form.

The style of the artist is in the tradition of the workshops of Rome. It is precise, competent, polished, rather meticulous of detail. Despite the destruction of the surface, the statue retains a characteristic suggestion of polished whiteness. This Roman manner is quite different from the livelier, larger, but frequently coarser handling of marble in Greek, "Asiatic," and, for that matter, North African ateliers. A glance at the statue of Trajan from Utica in Leiden (pl. 73, fig. 13), the alleged cuirass torso of Trajan in Olympia, and the Hadrianic statues from Athens, Knossos, and Hierapytna (pls. 72, 73, figs. 15, 16, 17) will illustrate the difference.

The major problem in the composition of a cuirass statue was the adjustment of an organic Greek motif to the heavy bulk of the cuirass. The Greeks managed to construct warrior statues in which armor subordinated itself to the general structure and motion of the body. The Romans, on the whole, did not. The portrait head and the cuirass were obviously uppermost in their minds, and they were unwilling to forego the artistically awkward size and shape of Imperial armor—for instance, the stiff pendent "skirt," whose length makes its wearers appear large-bodied and short-legged, while its

nearly horizontal lower edge effectively stops any vertical flow of plastic motion. A comparison of the reconstruction of the Doryphoros will make this point strikingly clear.²²

The sculptor of the Fogg Trajan did not escape these deficiencies, yet he salvaged something of the rhythmic motion of the Polykleitan original, at least in the left profile view (fig. 4). However, he turns the body out of axis and weights Trajan's left side with a large and continuous fall of the cloak. As now constituted, the two supports make a rather awkward frame when the body is viewed frontally (fig. 2). In profile and quarter views, they align less obtrusively (figs. 1, 4). The artist obviously counted on front and side views. Details of the back are treated in a more summary fashion—rude drilled runs for folds of the cloak; straight parallel grooves to separate the leather "tabs"; three simple oblongs with superficial hints at folds to represent the chiton.

The handicraft and "handwriting" of this sculptor appear fairly clearly. He is aware in a general way of the effects of motion upon the various parts of the figure, and interested enough to indicate some of them. Thus the pteryges in the back are pulled up by the motion of the body (fig. 3), while the folds over the left leg are caused by the position of the left upper leg (figs. 1, 2). The turn of the head and the attentive downward glance are given a certain life which is neither hectic nor insensitive (figs. 5, 6, 7), and a similar individual effect is attained in the pursed mouth. Pictorial hollowing of form is used sparingly—lock over forehead, inner eye corners, outer corners of lips—just to provide an emphatic touch.²³ For the rest, the sculptor works in a formulaic, Classicistic vocabulary.

To elect the Polykleitan motif was in itself a Classicistic decision. We cannot be certain whether the artist followed a Greek type or one of the fairly rare Roman cuirass statues devised in this scheme. The turn of the head to the right, the emphasis on

statues. It should be noted, however, that the cloak is worn by Trajan in a similar way in the official scenes of his column. Cf. Wilson, *op.cit.* fig. 63. Hamberg, *op.cit.* pl. 22f.

¹⁸ Augustus Prima Porta; the cuirass figure on the Ravenna relief, note 71. On the implied heroization, cf. G. Rodenwaldt, *Die Antike* 13 (1937) 8, who suggests that Augustus was shown with bare feet like a Greek hero because the Prima Porta statue was made after his death.

¹⁹ The original part of the right foot shows three vertical straps at the heel. Other vertical bands are apparently ends of leather straps which had been tucked under the leggings.

²⁰ Sisyphos in the Lysippan group at Delphi, Muthmann, *op.cit.* pl. 24; Hellenistic ruler, Hekler, *op.cit.* fig. 123.

²¹ For garment supports cf. Hekler, *op.cit.* fig. 140. J. Sieveking, *BWPr* 91 (1931) 1f, fig. 1, pl. 1.

²² P. Wolters, *MfB* 11 (1934) 125ff. Rodenwaldt, *op.cit.* 7, fig. 2. For the Greek attitude, cf. Hagemann, *op.cit.* 30ff, figs. 4, 13, 29, 36, 38, 45, 50f.

²³ The workmanship of the head recalls the head of Trajan as Herakles in an under-life-sized figure of Museo Nazionale, Rome. Gross, *op.cit.* pl. 2c, 18a (head). B. M. Felletti-Maj, *Catal. Museo Nazionale Romano* (1953) no. 166, with ill.

majestic display of the cuirass torso, and the recurrence of the Classical fold motif in the folds of the chiton suggest that he had in mind such Augustan originals as the statue of Prima Porta.²⁴ It is noteworthy that a similar compositional effect occurs in the Trajanic statue of Julius Caesar in the Palazzo Conservatori. On the other hand, the design of the left side with stately arrangement of the cloak recurs in the fragmentary cuirass statue of Trajan (pl. 73, fig. 14) and in a heroic statue (of Trajanic date?) found in Ostia.²⁵

In his treatment of traditional garment motifs—shoulder folds, leather tabs, chiton over left arm—the artist of the Fogg Trajan makes his forms more decorative, shallower, more static than those of Flavian sculptors. Something of the same trend may be seen in the cuirass statues of Trajan in Leiden or Copenhagen (pls. 73, 72, figs. 13, 12), but the comparison also shows the sculptor of the Fogg piece to some advantage. His arrangement of chiton is not symmetrically equalized and the falling tabs are permitted to retain a little life and variety. This is perhaps best observed in the one passage where the folds are preserved to original height—the brittle, thin, moving folds over the left hip (fig. 1, 2). Nothing of this life remains in the Caesar of the Palazzo Conservatori, which is executed in a more homogenous, simpler, larger style. The cuirass statue of Trajan in Ostia (fig. 14), despite very close resemblance of shoulder drapery and pteryges motif, has larger, more static detail.²⁶

The technique of the Fogg sculptor conforms to his stylistic situation. He is still capable of nice rounding and finish by careful chisel work, as in the face, the ornaments of the cuirass, and the folds of the chiton. Where it matters less, he uses long runs with intermediate stops of the drill—carefully

where they are seen, quite roughly where they are not—as in the garment folds on the back (fig. 4). These runs are used for local definition and shadowing of form in limited areas, the drapery on the shoulder, the leather tabs, the chiton over the right leg. Sequences of drilled dots are not as yet used for a pictorial device, with one exception—the ends of leather tabs on the left shoulder.

The Fogg master then emerges as a man who probably had his training in the Domitianic era, but marched right along toward a competent, slightly individualized brand of Trajanic Classicism. If he was active in Rome, he had a good chance of seeing Trajan. At any rate, with his selection of a slender canon (fig. 4) he comes closer than any other sculptor to endowing Trajan with the tall stature known from literary sources. And his rendering of the face of the aged and saddened emperor (Trajan was sixty-four at the time of his death) carries conviction.

To this extent the artist may have worked from observation. How far does this hold for other aspects of his statue? According to the etiquette of the Imperial court, Trajan should have been wearing a tunic with the broad purple stripe (*latus clavus*), which could hardly produce folds of the kind shown in the statue.²⁷ His cloak should have been clearly characterized as a rectangular garment clasped by a round brooch on the shoulder.²⁸ His shoes should be the *calcei senatores*, not sandals.²⁹ In each case it is perfectly clear that these details in the statue conform less to Roman reality than to artistic formulae of Classical Greek sculpture³⁰ with which the makers of the Imperial statues were so thoroughly familiar through their work in producing copies of Classical Greek statuary.³¹ Sieveking

²⁴ Cf. the view in Mancini, *BC* 50 (1922) pl. 11.

²⁵ H. Stuart Jones, *Cat. Palazzo Conservatori* (1926) 1f, pl. 1. Mancini, *op.cit.* pl. 19. It is not clear to me whether the cuirass statue in Ostia (pl. 73, fig. 14), where lower left leg is missing, was composed in a similar scheme. *AA* 55 (1940) 435, 410, fig. 14. The heroic statue in Ostia is known to me only from a reproduction in a popular magazine.

²⁶ Ostia: note 3, fig. 14. I am willing to contemplate the Conservatori Julius Caesar and the Hercules-Trajan of the Museo Nazionale as possible attributions to the Fogg sculptor. The poor state of preservation of the Fogg head makes precarious any attempt to link it with other heads. R. West, *Römische Porträtplastik* 2 (1941) 60ff, pl. 18:66, thinks the cuirass statue with adventitious Trajan head in the Louvre may be Trajanic. Like Sieveking, *op.cit.* 15, I consider the statue Claudian.

²⁷ L. M. Wilson, *The Clothing of the Ancient Romans* (1938)

59ff, figs. 30, 40, 51. The *clavus* should have been shown, if traditional Roman dignity was to be made clear.

²⁸ Wilson, *op.cit.* 100ff, figs. 63f.

²⁹ Trajan wears neither the *calceus*, which was a closed shoe, nor the military *campagus* which had a leather part protecting the heel and ankle. It is true, however, that identification of ancient foot-wear from literary sources is a difficult affair. Cf. Hug, *RE* 2, 741ff. H. Blümer, *Die römischen Privaterhümer* (1911) 255ff, figs. 46-48, the last, with open toes, like Trajan's, allegedly a *caliga*.

³⁰ The chiton follows a fifth century formula, as in the stelae from Megara and in Worcester. R. Carpenter, *AJA* 54 (1930) 335, fig. 18. For the ubiquitous cloak motif, cf. note 70; for the shoes, note 20.

³¹ The Trajan cuirass statue in Ostia appears closely related to a large nude "Polykleitan" figure from Ostia, cf. note 25.

has suggested that even the relief-decorated cuirass, this proud symbol of *Romanitas*, had never existed in real life, that it is purely an artistic device for display of Imperial allegories.³² Certainly this is not the kind of armor that Trajan wore in battle, though we may still assume that parade cuirasses decorated with reliefs were worn on special occasions.³³

Apart from the portrait head, a statue such as the Fogg Trajan is not based on observed reality but rather constitutes a translation of reality into traditional, heroic mode. It would be a mistake to imply that compositions arrived at in this synthetic manner were devoid of meaning for the Romans. Though couched in a language of allegoric reality, the cuirass statue of Trajan was to them a perfectly clear statement of an important aspect of the personality and achievement of the emperor. Such a statue declared whether the emperor was conceived as exercising his civil, his religious,³⁴ or his military functions. It explained whether he desired to emphasize his human, his mythic-heroic, or his divine aspect.

To illustrate this iconological mode of Roman art more closely, it may be well to consider whether the revival of an Augustan cuirass type and the choice of a Polykleitan posture by the sculptor of the Fogg statue had a special significance for the Roman spectator. The Elder Pliny contrasts the cuirass statue as a Roman art-type *par excellence* with the Greek nudes: "*Graeca res nihil velare, at contra Romana ac militaris thoraces addere*," (NH 34:18).³⁵ Actually the matter was not so simple. The desire to create a new convincing plastic type for heroic holders of *imperium* arose, as we might

expect, in the time when Marius, Sulla, and the triumvirs made the *imperium* a crucial force. A traditional Etrusco-Roman type of helmeted warrior was available,³⁶ but it was not utilized for the new concept of the warrior *princeps*. Rather, the Roman cuirass statues oscillate between two types of Hellenistic ruler statues, a traditional type of Mars, and adaptations of nude gods and heroes. Thus the statue from Hercules' temple in Tivoli, which if not Sulla then surely is one of his lieutenants, places the cuirass next to a semi-nude figure in generalized Greek dress.³⁷ This was apparently not sufficiently militant and specific. The late and rare Hellenistic type, itself fashioned in the likeness of Poseidon, and showing a cuirassed, bare-headed ruler leaning on a spear in his upraised hand, was then taken up, except that Roman statues rarely showed the hero stepping on a trophy or a captive.³⁸ There was an implication of divinity about this spear-holding type which led to fusion with a traditional Republican type of Mars,³⁹ but the helmet of the god of war is omitted in the honorary cuirass statues. This Mars-like posture remained a favorite through the Imperial age, and we may surmise that a partial identification with Mars is implied whenever the type is used.

By contrast, the Augustan artist aimed at a different association of ideas when he adopted a *statua Achillea* for the famous cuirass statue of Prima Porta. Neither god nor man, but a hero of mythical courage and virtue, a *vir gravis et sanctus*,⁴⁰ is implied. This aspect of heroized vigor and strength is underlined by the unrealistic barefootedness and the addition of Eros and dolphin. We may be quite certain that such famous Classic statuary as the

For proof of the identity of portraitists and copyists, cf. G. M. A. Richter, *PAPS* 95:2 (1951) 189ff. *Three Critical Periods* (1951) 53ff, esp. fig. 113, cuirass statue from Butrinto.

³² *BWPr* 91 (1931) 12.

³³ Sieveking observes that no relief-decorated cuirass of metal has ever been found. The reliefs of the column and "Grand Frieze" show Trajan in a plain cuirass, but a cuirass enriched with griffins and scrollwork is worn by the Trajan crowned by Victory on the vault of the arch at Beneventum. Cf. C. Pietrangeli, *L'Arco di Traiano a Benevento* (1943) pl. xxv. For field armor, cf. P. Couissin, *Les armes romaines* (1926) and M. Durry, *Les cohortes prétoriennes* (1938), who thinks Roman urban artists were quite inaccurate in rendering actual field equipment. See also below, n. 167.

³⁴ As in the toga statue and statues *capite velato*. Cf. I. S. Ryberg, *MAAR* 22 (1955) 22f, 43f, and *passim*. A togate Trajan may have stood in the Curia. A. Bartoli, *NS* 72 (1947) 85ff, figs. 9ff (porphyry statue); yet see below, IV, No. 24.

³⁵ Cf. H. Jucker, *Vom Verhältnis der Römer zur bildenden*

Kunst der Griechen (1950) 57, no. 3, on the Roman antipathy against nudity.

³⁶ E. H. Richardson, *MAAR* 21 (1953) 105.

³⁷ B. Felletti-Maj, *Museo Nazionale Romano, I Ritratti* (1953) 33f, no. 45, lists the proposed identifications.

³⁸ Hekler was the first to show that such Hellenistic statues existed. *op.cit.* 194f, fig. 123. This has been confirmed by the publication of the cuirass statue of Mithradates from his monument at Delos, dated 102 B.C. F. Chapouthier, *Delos* 16 (1935) 38ff, figs. 43f. Cf. Figs. 20, 17 (coin of Trajan, statue from Hierapytna).

³⁹ Mars: Ryberg, *op.cit.* pls. 6:14, 8:17b. Republican cuirass statues in Munich and S. Antioco: Sieveking, *op.cit.* pl. 1; the right date in B. Schweitzer, *Die Bildniskunst der römischen Republik* (1948) 65. Hekler, *op.cit.* fig. 140.

⁴⁰ H. Jucker, *op.cit.* p. 167, quotes Quintilian 5:12,20, who contrasts effeminate works of art with *doryphorum illud aptum vel militiae vel palestra*.

Polykleitan Achilles and the Diomed with the paladium were sufficiently well known to the Romans for them to grasp the allusion to heroic quality thus claimed by an emperor. The use of well known mythological statues in sculpture was comparable to the use of a mythological comparison in literature and could, of course, be made even more explicit in statues where the emperors appeared not only in heroic types but also in heroic nudity.⁴¹

This official Roman mode with Greek heroic overtones may have been used by the sculptor of the Fogg statue to accomplish more than one purpose. His Trajan was destined to recall the other

great commanders of Rome, perhaps Caesar⁴² as well as Augustus. Roman spectators might also have been reminded of the many *allocutio* scenes on the column of Trajan. But one potential spectator was certainly more discerning. To see the late hero of the Parthian war assimilated to Achilles, whose life was cut short in the midst of his fighting career, would not have displeased a mind as steeped in Classic lore and eyes as practised in Greek art as those of Hadrian.

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⁴¹ Some material in G. Lippold, *Kopien und Umbildungen* (1923) 178-182, who very rightly states that these are not literal copies. For the nude hero à la Diomed, the Trajan in the Glyptotek Ny Carlsberg offers an example. W. H. Gross, *op.cit.* pl. 1, F. Poulsen, *Cat.* (1951) 378f, no. 543a.

⁴² Whose statue in the Forum Julium (Pliny, *NH* 34:18) may

have been restored by Trajan. H. Stuart Jones denies that there is any authentic tradition behind the reiterated assertion that the Caesar of Palazzo Conservatori (n. 25) was found in the Forum of Caesar (as lastly R. West, *op.cit.* 1 [1933] 94, pl. 22). For the literary tradition on Caesar's statue, cf. A. D'Accini, *BC* 71 (1943-5) 113f.

II. Interpretation, Typology, and Date

CORNELIUS C. VERMEULE

The cuirassed statue of Trajan is not only the most complete statue of this type in an American collection but also a document of some importance in understanding the historical and artistic policies of the closing years of the age of Trajan and the accession of his distant relative and enlightened successor, the Emperor Hadrian (A.D. 117-138).⁴³ A wealth of iconographic detail confirms the conclusion that this is a posthumous statue presenting Trajan as the successor to Augustus in settlement of the Eastern or Parthian question. Details in the enrichment of the cuirass indicate that this is a statue of Trajan as (DIVUS) TRAIANUS PARTHICUS AUGUSTUS PATER, to quote the titles of an aureus

struck by Hadrian within the year of the death of his predecessor.⁴⁴ The statue is one of the several surviving sculptural testimonies of the manner in which Hadrian sought to strengthen his own imperial position by honouring the last great acts of the man by whom he claimed adoption and from whom he claimed the right of imperial succession.⁴⁵

As shown above, the Fogg Trajan should probably be restored with the right arm in a gesture of imperial greeting, command, or speech (*adlocutio*) and, most likely, with a parazonium or short sceptre in the crook of the left arm, in close correspondence with the Prima Porta Augustus, which, as we shall see, it parallels in the iconography of the cui-

⁴³ So far as is known, there are only two other marble cuirassed statues in America. The more important is the cuirassed torso designed originally for a Flavian emperor, perhaps the Emperor Domitian (Caesar A.D. 69-81; Emperor 81-96) in the Museum of Fine Arts, Boston (pl. 72, fig. 10); L. D. Caskey, *Cat. of Greek and Roman Sculpture in the Museum of Fine Arts, Boston* (Harvard Univ. Press, Cambridge [Mass.] 1925) 207ff, no. 122; G. H. Chase, *Greek and Roman Antiquities, A Guide to the Classical Collection* (Boston 1950) 145f, fig. 187; G. M. A. Richter, "Who Made the Roman Portrait Statues—Greeks or Romans?", *PAPS* 95, no. 2 (1951) 189ff, fig. 48. The missing head and right arm were made separately. The torso in the Walters Art Gallery, Baltimore (Inv. no. 23.80), restored as a statue of Marcus Aurelius, is a later Julio-Claudian work, modelled on the Prima Porta Augustus. It comes from the Massarenti Collection in Rome (*Catalogue du*

Musée . . . au Palais Accoramboni, II, 1897, 143, no. 14).

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⁴⁴ H. Mattingly, *Coins of the Roman Empire in the British Museum* (hereafter *BMCCRE*) III 244, no. 47, pl. 47, 7. The reverse, TRIVMPHVS PARTHICVS, shows Trajan (or his effigy) standing r., in a triumphal quadriga: *HistAug* (ed. Loeb-D. Magie) *Hadriani* VI. 3, and p. 18f, note 5.

⁴⁵ On Hadrian's attitude to the success (or failure) of Trajan's Eastern campaigns, see F. A. Lepper, *Trajan's Parthian War* (Oxford Univ. Press 1948) 202: "conduct of the war was hailed as a military masterpiece," etc.

rass.⁴⁶ In all respects, including the walking pose, this arrangement of the arms would also correspond to the representation of the cuirassed Germanicus on the reverse of a dupondius assigned to his son, Caligula (A.D. 37-41), and commemorating a parallel to the recovery of the Parthian standards in 20/19 B.C.—the recovery of the standards lost by Varus at Teutoburger Wald in A.D. 9 and the subsequent triumph celebrated by Germanicus on 26 May A.D. 17 (SIGNIS RECEPT DEVICTIS GERM)⁴⁷ (pl. 75, fig. 29, no. 1).

In order to confirm the conclusion that the Fogg statue is a posthumous representation of Trajan as OPTIMUS PARTHICUS AUGUSTUS, four main aspects of the statue must be considered. The portrait head must be shown to belong with those of the last years of Trajan or the initial years of his successor. The stance and style of the figure in its entirety and in details must accord with the transition from the art of Trajan's age to that of Hadrian. The iconography of the breastplate must suggest the campaigns beyond the Eastern frontiers, and there must be some indication in this enrichment, or in the enrichment of the pteryges,⁴⁸ that the statue hon-

ours at least the deceased if not the deified Optimus Princeps.

To find secure examples of late portraits of Trajan, we turn to sculptures on the Arch of Trajan at Beneventum. The inscription indicates a dedication by the Senate and the Roman People between 29 August and 9 December A.D. 114, and the sculptured reliefs on the arch can hardly be earlier than the first of these dates. Beyond this fact, the inscription leaves latitude for two possibilities: that these dates mark the decree which resulted in the subsequent construction of the arch and that these dates mark those of the actual completion of the monument.⁴⁹ The presence of Hadrian in the right panel in the attic of the side facing the Campagna (pl. 73, fig. 11) and his prominence in military costume on the corresponding panel of the Beneventum side seem to give indication that the monument was not finished or that these panels were adapted after Trajan's death, "to enhance belief in the story that he had formally adopted, and long since designated, his successor."⁵⁰ The surviving portions of Dio Cassius' life of Trajan and the beginning of his account of that of Hadrian make

⁴⁶ The inconsequential restorations of the Prima Porta statue are described in detail in its basic publication: W. Amelung, *Die Sculpturen des Vaticanischen Museums*, I (Berlin 1903) 19f, Braccio Nuovo no. 14.

⁴⁷ BMCCE I, cxlvii and ancient sources, 160f, nos. 93ff, pl. 30, nos. 9f. The cuirassed Germanicus on Caligula's *aes* certainly suggests a statuary prototype, although not one in the so-called Doryphoros pose of the Prima Porta Augustus and the Fogg Trajan, for the weight is on the left rather than the right leg. Germanicus holds one of the aquilae recovered from the Germans in the crook of his left arm. This is the pose of the so-called Drusus Senior from Caere and in the Lateran (*Mostra Augustea della Romanità*, Catalogo, Sala XVII, pl. XLIX; R. West, *Römische Porträt-Plastik*, Munich 1933, 132, 257, pl. xxxiv, fig. 139, also, in a slightly different photograph, pl. XL, fig. 170), a statue which on more than one occasion has been identified as Germanicus (Arndt and Lippold, *Einzelstudien*, no. 3289 [Villa Albani] and further refs.). The Greek archetype of this pose is to be seen in the Munich "King" ("Thucydides"), a marble statue of a bearded god or person of renown, in the heroic nude (BrBr, pl. 122). This figure is now recognized as a classicistic copyist's adaptation of a work close to the Dresden Zeus (ca. 430-400 B.C.; Lippold, *Handbuch der Archäologie* III, 1, 212; idem, *RM* 32 [1917] 95ff). A better iconographic candidate for Germanicus among complete cuirassed statues in this stance is the statue found in the local theatre and now in the Municipal Museum at Vaison. The coin type and the Vaison statue could copy an honorary statue set up in Rome on the occasion of Germanicus' triumph of A.D. 17, just as the Prima Porta Augustus must copy a gilded bronze statue set up in the decade following the Parthian settlement (on Germanicus iconography: Curtius, *Mdl* 1 [1948] 69ff, esp. 86ff). The statue at Vaison may be as late as the Flavian period; details of the breastplate parallel those of the Boston statue (see note 43; also Espé-

randieu, *Receuil* IX, no. 6766).

⁴⁸ Throughout this section the term *pteryges* (from πτερυγες; see refs. in Liddell, Scott, Stuart Jones, *Lexicon* II, 1547) is used to denote the representation in marble of the small leather or metal, rectangular or semi-circular flaps which form the transition from the lower mouldings of the metal breastplate to the area of the leather skirts continuing beneath and below, to the knees of a man in Roman armour.

⁴⁹ The second theory has been stated most recently by P. G. Hamberg, *Studies in Roman Imperial Art with Special Reference to the State Reliefs of the Second Century* (Copenhagen 1945) 63ff. See also U. Scerrato, *ArchCl* 5 (1953) 219ff, and on the subject of the completion of the arch in relation to Hadrian's succession, M. Hammond, *MAAR* 24 (1956) 90ff.

⁵⁰ J. M. C. Toynbee (review of Hamberg) *JRS* 36 (1946) 181f. The belief that the monument was not completed until after Trajan's death is stated in very strong terms by C. Pietrangeli, *L'Arco di Traiano a Benevento: documentario fotografico*, 1943 (Documentario Athenaeum Fotografico) 3: "Così si spiega il concetto dell'apoteosi imperiale che informa tutta la decorazione figurata dell'arco, in cui solo un velo sottile sembra dividere l'Imperatore dalle divinità dell'Olimpo romano. Anche la presenza di Adriano accanto all'Optimus Princeps e la evidente benevolenza della Dea Roma verso di lui sono indizi di una narrazione retrospettiva in cui l'Imperatore regnante desiderava figurare degnamente accanto al predecessore da lui onorato." He sees the beginnings of Hadrianic classicism in the attic reliefs, in contrast with those historical scenes of the lower part of the arch. (E. von Garger, *Der Traiansbogen in Benevent*, Berlin 1943, presents the same photographs in the same order as the Italo-French edition cited here). See also the refs. below, notes 163ff, esp. Ryberg, *MAAR* 22 (1955) 153ff.

quite clear the inconspicuous position of Hadrian in his kinsman's inner circle and the fact that Hadrian's succession was a matter of intrigue and swift action on the part of Plotina and other friends close to the deceased Emperor.⁵¹ That Hadrian completed the arch at Beneventum without altering the original titlature of the attic and without including his own name was part of his policy of cautious modesty following ruthless boldness. He could decimate Trajan's inner circle, Palma, Celsus, Nigrinus, and Lusius Quietus,⁵² but he could also give Trajan divine honours and a posthumous triumph: *ut optimus imperator ne post mortem quidem triumphum amitteret dignitatem*.⁵³ Hadrian could afford to rebuild monuments such as the Pantheon of Agrippa without inscribing his name on them. His name appeared only on the templum Traiani patris, a monument obviously started and finished at his instigation.⁵⁴ In short, probabilities are in favour of regarding the two portraits of Trajan on the Beneventum attic as posthumous, and with this in mind we may compare them with the head of the Fogg statue. We shall go further and suggest in our consideration of the pteryges of the Fogg cuirass that there is evidence that the small, continuous frieze below the attic of the Beneventum arch was designed or altered to represent the posthumous triumph accorded Trajan by the Senate at the suggestion of his successor.

Although affected by the general weathering of surfaces and by the cleanings to which the statue has been subjected in years past, the Fogg head (pl. 71, figs. 5-7) still imparts that quality of dreamy thoughtfulness, marked by lines of age and fatigue, which seems to characterize the portraits of the

last years of Trajan.⁵⁵ The somewhat sunken eyes, the furrows above the corners of the mouth, and the wrinkles running around the chin mark this head as a portrait of the aging Emperor beset not only by the cares of his last great series of campaigns but probably by the illness which terminated his career at Selinus in Cilicia in August 117, while on the voyage back to Italy.⁵⁶ The hair over the forehead is more deeply undercut and is divided into more irregular groups of strands than is characteristic in portraits showing Trajan in the stern vigour of the height of his career, the period immediately following the Dacian Wars.⁵⁷

In every respect the Fogg portrait corresponds to that of the Campagna panel of the Beneventum arch⁵⁸ (pl. 73, fig. 11) and to what can be judged of the rather ruined portrait in the corresponding panel on the Beneventum side.⁵⁹ The Fogg head has as its direct counterpart among Hadrianic portraits of Trajan the cuirassed bust brought from Hadrian's Villa at Tivoli by Sir William Hamilton and recently rediscovered in the Armoury at Warwick Castle.⁶⁰ The shape of the bust, which is original, supports the Hadrianic dating suggested by style and provenance.⁶¹ The head of the Fogg Trajan lacks the aura of divinity and the noticeably Hadrianic treatment of the locks found in the Ostia head⁶² and its less subtle replica in Olympia.⁶³ These heads must surely, as Gross has pointed out, be Hadrianic transcriptions of Trajanic types to suit a representation of Divus Traianus.

Turning from the portrait head to the body and figure of the Fogg Trajan as a stylistic document of the transition from the era of Trajan to that of Hadrian, we observe in the shadowed, plastic cut-

⁵¹ There is only one mention of Hadrian in Dio's account of Trajan (LXVIII 33.1): "Trajan was preparing to make a fresh expedition into Mesopotamia, but, as his malady began to afflict him sorely, he set out, intending to sail to Italy, leaving Publicus Aelius Hadrian with the army in Syria"; trans. E. Cary (ed. Loeb, VIII 423). LXIX 1.1 (ed. Loeb, VIII 425): "Yet he had received no distinguishing mark of favour from Trajan, such as being one of the first to be appointed consul." *HistAug Hadriani* IV. 8, even notes the belief that Trajan was planning to appoint L. Neratius Priscus, the jurist, as his successor.

⁵² Dio LXIX 2.5; *HistAug Hadriani* VII 1-3. Trajan even set up images of Palma and Celsus (Dio LXVIII 16.2), and, of course, Lusius Quietus the Moor was greatly honoured (LXVIII 18.4) and trusted (30.1; 32.3) by Trajan.

⁵³ *HistAug Hadriani* VI 1-3. The effigy of the dead Emperor was carried in the triumphator's chariot (see above, note 44).

⁵⁴ *HistAug Hadriani* XIX 9f.

⁵⁵ W. H. Gross, *Bildnisse Traians (Das römische Herrscherbild II 2)* Berlin 1940, 52f.

⁵⁶ Lepper, *op.cit.* 199ff.

⁵⁷ Cf. Gross, *op.cit.* pls. 37-41, details from the Column of Trajan. The column was begun not earlier than A.D. 107 and dedicated 12 May 113, although it may have been finished by Trajan's fifth Consulate (not later than A.D. 111), when it appears on coins (*ibid.* 43f).

⁵⁸ *ibid.* pl. 42f (detail); Pietrangeli, *op.cit.* pl. VII.

⁵⁹ *ibid.* pl. XIII.

⁶⁰ C. C. Vermeule and D. von Bothmer, "Notes on a New Edition of Michaelis: Ancient Marbles in Great Britain. Part II," *Warwick Castle, AJA* 60 (1956) 345, pl. 110, fig. 26; Gross, *op.cit.* 133, no. XI. The information on provenance was supplied from records in the Warwick Castle Estate Office.

⁶¹ Cf. the bust of Hadrian in Naples; A. Hekler, *Greek and Roman Portraits* (London 1912) pl. 247b, and its counterpart at Blenheim Palace: Vermeule and von Bothmer, *op.cit.* 323, fig. 27.

⁶² Gross, *op.cit.* 112ff, pls. 33ff.

⁶³ *ibid.* 132, no. 73; G. Treu, *Olympia. Die Ergebnisse III* (Berlin 1897) 248, pl. 61, no. 3.

ting of paludamentum and leather skirts the same sense of sculptured form which sets the reliefs in the attic of the Beneventum arch off from the lower historical panels of the faces of the arch.⁶⁴ This plastic sensitivity is not present in earlier cuirassed statues of Trajan, those in Copenhagen, Leiden, and Ostia⁶⁵ (pls. 72, 73, figs. 12, 13, 14). It is lost again in the headless cuirassed statue identified as Trajan, which comes from the Exedra of Herodes Atticus constructed at Olympia about A.D. 156 to honour the Caesar Marcus Aurelius and his family.⁶⁶ Among the cuirassed statues of Hadrian this style, including the deep cutting of cascading drapery, appears in the group of statues centered around examples in Olympia,⁶⁷ in the Agora⁶⁸ (pl. 73, fig. 15), and the variant with Roma instead of Athena on the breastplate, found at Cnossus⁶⁹ (pl. 72, fig. 16). The arrangement of the paludamentum in falling folds over the left arm and the use of the Doryphoros pose might be said to be

devices suggesting not only Augustan iconography but the beginnings of a reinterpretation of the classicism of the Augustan age. This arrangement of the paludamentum recalls that of the Louvre "Germanicus," the drapery of the Hermes after Praxiteles, and variants of the Hermes Ludovisi.⁷⁰ It leads to such sculptural devices as the heavy cloak pinned with a brooch on each shoulder and falling down as enframement for the back, as in the Cnossus Hadrian (pl. 72, fig. 16) or the statue in Istanbul from Hierapytna on Crete (pl. 73, fig. 17), where part of the cloak is also wrapped around the left forearm.⁷¹

Two of the three identifiable cuirassed statues employing the Doryphoros pose before Trajan belong to the Augustan or Julio-Claudian periods: the Prima Porta Augustus, the Nero in Istanbul,⁷² and the Vespasian or Titus found in the Forum at Sabratha⁷³ (pl. 74, fig. 18). The colossal, headless cuirassed statue in Doryphoros pose in the court-

⁶⁴ The theory of stylistic differences between the reliefs of the arch and attic (see note 50) has been propounded with vigour and in detail by G. A. S. Snijder, *JDAI* 41 (1926) 94ff, esp. 125ff, firmly supported by C. Weickert, *Gnomon* 3 (1927) 225, and questioned severely by Hamberg, *op.cit.* 71ff, and others. Certainly one can agree with Hamberg (72) that the animated, bold working of the attic reliefs cannot be compared with the reserved elegance of the late Hadrianic-early Antonine tondi on the arch of Constantine.

⁶⁵ Gross, *op.cit.* 53ff, pl. 3; F. Poulsen, *Catalogue of the Ancient Sculpture in the Ny Carlsberg Glyptotek* (Copenhagen 1951) 377f, no. 543; see supra, note 3, infra, note 195; IV, no. 1.

⁶⁶ Gross, *op.cit.* 58f, pl. 2.b; Treu, *Olympia* III, 266, 271f, pl. 65, 2. Schleif and Weber, *Olympische Forschungen* I, 60, date the statue in the Hadrianic period, before the Herodes Atticus reconstruction of the Exedra or Nymphaeum.

⁶⁷ Treu, *Olympia* III, pl. 65, 1; West, *op.cit.* II, pl. 33, fig. 125.

⁶⁸ E. B. Harrison, *The Athenian Agora I, Portrait Sculpture* (Princeton 1953) 71ff, no. 56 and full refs. to the ten statues in the group, all found in the Greek East. Her no. 5 seems to be identical with the statue republished by J. M. C. Toynbee, *Essays in Roman Coinage Presented to Harold Mattingly*, Oxford 1956, 213, note 2, fig. 8c.

⁶⁹ E. Strong, "Sulle tracce della Lupa Romana," *Scritti in onore di B. Nogara* (Vatican 1937) 487, pl. LXIX, 1; *AJA* 58 (1954) 254; Toynbee, *Essays to Mattingly*, 213f, fig. 8b.

⁷⁰ R. Carpenter, "Two Postscripts to the Hermes Controversy," *AJA* 58 (1954) 10f. The same lengthening to a secondary support at the l. foot occurs on the base of a statue identified as Hadrian, ca. A.D. 118 (*RA* 1913:1, 107f, fig. 1); only the Celtic prisoner against the support for the r. leg, the r. leg, and the sandaled feet remain.

⁷¹ Photo Alinari no. 47009 (from the Mostra Augustea cast); West, *op.cit.* II, pl. 33, fig. 126; Harrison, *op.cit.* 73. Such costume can be seen in the first century A.D. in the Agrippa of the Julio-Claudian relief in Ravenna: Photo German Arch. Inst., Rome, 39.834; M. Santangelo, *BdA* 34 (1949) 198ff, fig. 5; V. H. Poulsen, *Acta* 17 (1946) 32ff, fig. 24. I. S. Ryberg

MAAR 22 (1955) 92 identifies this figure as Drusus Maior.

⁷² From Tralles and, although headless, identified by the inscription Νέρων Κλαύδιον Θεοῦ Κλαύδιον Καίσαρος υἱόν on the plinth: G. Mendel, *Musées Impériaux Ottomans, Catalogue des sculptures grecques, romaines et byzantines* (Constantinople 1914) II, 315f, no. 584; F. W. Goethert, "Ein Panzertorso in Beirut," *Berytus* 2 (1935) 137, pl. LII, no. 3; F. Muthmann, *Statuenstützen und dekoratives Beiwerk an griechischen und römischen Bildwerken* (Heidelberg 1951) 50f, 211, pl. VIII, fig. 18 (detail).

⁷³ H. St. J. Hart, "Judaea and Rome. The Official Commentary," *JThS* (Oct. 1952) 172ff, pls. II, VI; G. Caputo, "Sculpture dallo scavo a sud del Foro di Sabratha (1940-42)," *Quaderni di archeologia della Libia*, I (Rome 1950) 7ff, pl. Iva. Of the Hierapytna statue (his 198, pl. VI, 3) Hart observes: "His left foot tramples a barbarian child (sic!) to the ground. Unless the symbolism be entirely general, there may be a reference here to the Second Revolt" (A.D. 135). Arguments for placing the Hierapytna statue earlier in Hadrian's reign and seeing it as a commemoration of his general Eastern settlement are: even if the lad beneath Hadrian's feet can be proven a Jew, there was a major victory (of Lusius Quietus) over the riotous Jewish populace of Egypt and Cyrenaica at the close of Trajan's career (Dio LXVIII 32.3; *HistAug Hadriani* V. 1-5), an event still celebrated at Oxyrhynchus a century later (Youtie, *Gnomon* 27 [1955] 360); the iconography of this Eastern settlement must have been as confusing to artists as it was to the Senators who voted Trajan an "open end" triumph because they could scarcely pronounce the names of the many nations over which he claimed victory (Dio LXVIII 28.3; 29.2-4); the quiver and bow incorporated in the support should allude to Parthia, as it does on Trajan's coins (A. C. Levi, *Barbarians on Roman Imperial Coins and Sculpture*, A. N. S. Num. Notes and Monogr. no. 123, New York 1952, 20f, note 32); the bound Oriental of the left center cuirass flap wears a Parthian cap, never worn by Jews in Roman art, and is the counterpart of the Parthia personified on REX PARTHIS DATUS coins of Trajan recording the appearance of the Parthian prince Parthamasiris before Trajan at Elegeia in A.D. 114 (Levi, *op.cit.* 18f, pl. VII,

yard of the Cherchel Museum (pl. 74, fig. 19) has been identified as Augustus,⁷⁴ or at least a Julio-Claudian prince,⁷⁵ chiefly from the scenes involving Mars Ultor, Venus Genetrix, and Julius Caesar or Augustus on the cuirass and from the early type of the palm-stump support, but the style of drill and drapery might well place the statue among the same group of earlier Hadrianic cuirassed statues which we have been considering.

The essential elements of the reliefs on the breastplate of the Fogg Trajan can be picked out without too much difficulty (pl. 72, fig. 8). Only the enrichment of the unrestored part of the right shoulder strap (perhaps a fulmen?) is too damaged by weathering and defects in the marble to be identified with any certainty. In most cuirass statues this detail (where visible beneath the paludamentum) is generally of a conventional nature, stylized thunderbolts, griffins, and lion heads comprising the bulk of an ornamental repertory which was studied by Gioacchino Mancini in a basic catalogue of imperial cuirasses compiled over thirty years ago.⁷⁶ Exceptional motifs include the Sphinx signets on the straps of the Prima Porta Augustus,⁷⁷ a giant on a statue identified as Titus in the Louvre,⁷⁸ and

a small group with enrichments showing Victories carrying triumphal ornaments.⁷⁹ The type of lion-headed, ring-and-strap fastening of the shoulder strap to the breastplate on the Fogg Trajan is of common design; this detail is hidden by the paludamentum on the Olympia and Agorá statues of Hadrian (pl. 73, fig. 15), but the Hierapytna statue (pl. 73, fig. 17) and the Cherchel "Augustus" (pl. 74, fig. 19) provide exact parallels.

Like the majority of known breastplates, that of the Fogg statue features the Gorgoneion as the sole ornament of the upper centre.⁸⁰ The type of the Gorgoneion varies from the archaistic mask with snakes hardly visible as on the Fogg cuirass to the most sophisticated version of the Hellenistic-type pathetic Gorgoneion, as seen on the Warwick Castle bust of Trajan, the torso of the colossal Capitoline "Mars Ultor,"⁸¹ and, in an extreme version, on a mid-second century A.D. cuirassed statue in the Giardino Boboli with head of Marcus Aurelius, which probably belongs.⁸² There seems to be no rule for types of Gorgoneia on certain imperial cuirasses, although the earlier, more severely Neo-Attic carving seems to prefer the archaistic mask types.⁸³

3); and, finally, the question of a renewed Parthian war was a vital one as late as A.D. 122-123 (*HistAug Hadriani* XII. 8: ed. Loeb, 39, note 4).

⁷⁴ S. Gsell, *Cherchel. Antique Iol-Caesarea* (Algiers 1952) 88ff, no. 177 and pl.; M. Durry, *Ann Gand* I (1937) 114ff; E. Strong, *La scultura romana da Augusto a Costantino I* (Florence 1923) 22ff, fig. 11.

⁷⁵ Muthmann, *op.cit.* 110, 210.

⁷⁶ G. Mancini, "Le statue loricate imperiali," *BullComm* 50 (1923) 151ff, esp. 200. He listed 150 Roman imperial cuirassed statues, torsos and fragments. As later writers have pointed out (e.g. Goethert, *loc.cit.*), his list is condensed and uncritical, but it is the only published effort to arrange all these statues in chronological order. The present writer is engaged in a revised continuation of Mancini's catalogue. Much also remains to be done in comparing imperial cuirassed statues with cuirasses worn by emperors and others in dated Roman state reliefs (such as the Column of Trajan or the various scenes on the Arch of Constantine).

⁷⁷ Mancini, *op.cit.* 179, no. 1.

⁷⁸ Mancini, *op.cit.* 167, no. 12, 182, no. 25.

⁷⁹ Mancini, *op.cit.* 200, nos. 8, 9; also the splendid cuirass fragments in the Ny Carlsberg Glyptotek, Copenhagen, showing a hovering Nike with trophy on the shoulder strap: F. Poulsen, *Cat.*, 389, nos. 553f. Poulsen suggests these are fragments of a statue of Augustus, noting that what survives of the principal scene suggests military events in Gaul. The cuirassed bust of Hadrian, Copenhagen no. 682 (Poulsen, 477f), and replicas feature archaistic, long-bearded Tritons on the shoulder straps. For later Trajanic-Hadrianic cuirasses with Erotes on the shoulder straps, see below note 196.

⁸⁰ The Prima Porta Augustus shows Caelus presiding over a section of the heavenly cosmos. (On such subjects featuring

Caelus, see the recent bibl. and lists supplied by F. Matz, "Der Gott auf dem Elefantenwagen," *AbhBerl* [1952] no. 10, 72ff, esp. note 2.) The Cherchel statue shows a cosmic version of the Augustan cult image of Mars Ultor with right arm raised to hurl a thunderbolt. (For ancient representations of this statue: Vermeule, "Roman Cult Images on Coins of the Emperor Hadrian, Mars Ultor, Virtus, and Mars Victor," *NumCirc* 63 [1955] nos. 7-9, 371ff, and esp. notes 21-28). Mancini has collected eleven other subjects unusual for this part of the cuirass: Poseidon, Selene, Sol in his quadriga, and even a representation of Jupiter Dolichenus (Mancini, *op.cit.* 200, Sec. C). A Hadrianic cuirassed bust with alien bearded head, at 156 Via del Babuino, Rome, in Aug. 1956, is unique in having *Dea Roma* or Virtus in place of the Gorgoneion.

⁸¹ A. Hekler, "Beiträge zur Geschichte der antiken Panzerstatuen," *JOA* 19-20 (1919) 190ff, esp. 226f, figs. 119, 154. The statue has probably only represented Mars Ultor since its Cinquecento restoration (infra note 86, and *ArtB* 38 [1956] 37, fig. 11).

⁸² P. Arndt, G. Lippold, *Einzelstudien* XII, no. 3451. A most exaggerated Medusa appears also on the breastplate of the complete statue of Marcus Aurelius as older Caesar, found in Alexandria and in the Alexandria Museum (no. 3520; M. Wegner, *Die Herrscherbildnisse in antoninischer Zeit*, Berlin 1939, 167, pl. 17).

⁸³ The Gorgoneion on the Fogg Museum cuirass may have shown the eyes closed, as in two parallel details on the Cancellaria Frieze B (Magi, Frieze A): F. Magi, *I rilievi fidei del Palazzo della Cancelleria* (Rome 1945) 18ff, figs. 15, 17, 18 and bibl.: 20, note 1. For the development of the Hellenistic Gorgoneion in imperial decorative art, see recently: *AJA* 59 (1955) 354.

The central design of the Fogg cuirass is set on an inverted palmette from which tendrils and rosettes spring left and right, forming an uneven lateral ground line. This decoration is most frequently associated with the common cuirass motif of two griffins flanking a candelabrum, starting with the Augustan statue of M. Holconius Rufus from Pompeii,⁸⁴ continued in the Germanicus or Drusus Senior of the Lateran,⁸⁵ and best known from the breastplate of the Capitoline "Mars Ultor."⁸⁶ It is found, however, as the setting for cuirass ornament of a more specific nature: the Louvre "Trajan" with bound barbarians beneath a trophy,⁸⁷ and the "Britannicus" in the Lateran with Arimaspes giving drinks to griffins, all beneath Sol in his chariot.⁸⁸ Apart from its restored head, this last statue may be a very close parallel for the shadowed cutting of details and drapery and the strategic use of drill points indicate work similar to that of the Fogg Trajan and its parallels discussed previously. The principal subjects of the breastplates of the Fogg and Lateran statues will be shown to form a perfect complement to each other.⁸⁹

In the centre of the Fogg cuirass (fig. 8) a youthful female figure, wearing a Phrygian cap and a short, Amazon-type chiton which falls in two heavy folds below her breasts, kneels on the calyx of the inverted palmette and endeavors to defend herself from two griffins who spring at her from the support of the tendrils and rosettes. The female looks

to the right as she tries to grasp the throat of the griffin on the right with her left hand; with her right hand she plunges a short sword or dagger into the stomach of the griffin on the left. The composition gives the impression that, although the struggle is one of great ferocity, the woman will be mortally worsted in the encounter.

We know from the writings of Herodotus and from extensive parallels in Greek and Roman art from the fifth century B.C. and later that the elderly, bearded or youthful male figures in Eastern barbarian costume who are associated in combat or otherwise with griffins are Arimaspes.⁹⁰ The Arimaspes dwelt in the country beyond the last Scythian tribes and, legend further states, engaged in combat with griffins in the land beyond, chiefly for the fabulous supplies of gold which the griffins guarded.⁹¹ In Hellenistic and Roman art Arimaspes appear to be thought of as servants of an Oriental divinity, Dionysos in his manifestation as Sabazios, and consequently in connection with Sardanapalus, that legendary Oriental potentate created out of memories of Mesopotamian luxury and catastrophe in the period of Assurbanipal (669-626 B.C.) of Assyria.⁹² It was quite evident that in late Hellenistic and Roman times Arimaspes were imagined as symbolizing the little-known peoples dwelling on the fringes of the classical world from the Eastern end of the Black Sea into the most distant lands reached by the conquests of Alexander

⁸⁴ Mancini, *op.cit.* 163f, pl. XII; Richter, *op.cit.* 190, fig. 52.

⁸⁵ Mancini, *op.cit.* 165, pl. XIII; supra note 47.

⁸⁶ Mancini, *op.cit.* pl. xv; supra notes 79, 81. The extensive restorations appear in the basic publication: H. Stuart Jones, *A Catalogue of the Ancient Sculptures Preserved in the Municipal Collections of Rome. The Sculptures of the Museo Capitolino* (Oxford 1912) 39f, Atrio no. 40, pl. 7. Hekler, mainly on the basis of parallels for the head, which he assumed belonged, dated the statue in the Hadrianic period (*JOAI* 19-20 [1919] 226f). Only detailed photographs of the unrestored parts of the pteryges, however, show the extensive drill points characteristic of Flavian to early Trajanic cineraria. A Flavian date is also suggested for the closely related fragment from Corinth (*AJA* 39 [1935] 69f, fig. 12).

⁸⁷ Mancini, *op.cit.* 183, no. 31, pl. XVII. Also supra note 26.

⁸⁸ Mancini, *op.cit.* 181, no. 18, pl. XIV; W. Helbig, W. Amelung, etc., *Führer durch die öffentlichen Sammlungen klassischer Altertümer in Rom* (Leipzig 1913) II, 13f, no. 1166. There is an iconographic replica of this statue (with head of Tiberius) in the Turin Museum: Mancini, *op.cit.* 181, no. 17; H. von Rohden, "Die Panzerstatuen mit Reliefverzierung," *Bonner Studien R. Kekulé gewidmet* (Leipzig 1893) 10. This statue is not to be confused with the cuirassed statue with alien (?) head of Tiberius, in the Castello d'Agliè, Turin (L. Polacco, *Il volto di Tiberio*, Rome 1955, 142; Reinach, *Rép. stat.* II, 575, no. 4; see infra note 121, for the "Augustus" in this collection).

⁸⁹ Muthmann, *op.cit.* 111, 194, 211, claims a Julio-Claudian dating on the evidence of the short palm-stump support below the ample drapery, but in this case it is impossible to see how such an object differs from those placed by his researches in the Hadrianic period: e.g. his pl. XX, fig. 45 (Castelporziano Discobolus) fig. 46 ("Antinous" Belvedere); or even later: pl. XXI, fig. 47 (headless cuirassed statue, identified as Marcus Aurelius and in Olympia: *Olympia* III, pl. 65, 3).

⁹⁰ Herodotus III 116; IV 13, 27, 32; J. L. Myres, *Herodotus, Father of History* (Oxford 1953) 44; W. W. How, J. Wells, *A Commentary on Herodotus* (Oxford 1936) I, 306f. Ctesias, writing in the early fourth century B.C., transferred the home of the griffins to the north of India (*Indica* 12, p. 250).

⁹¹ E. Saglio, in *DarSag* I, cols. 423f ('Αρμασπώ); Wernicke, in *RE* II, 1, 826f (Arimaspoi).

⁹² Weissbach, in *RE* Ser 2, 1, 2 (R-Z, 1) 2346ff, esp. 2475 (Sardanapal). L. Curtius, "Sardanapal," *JDAl* 43 (1928) 281ff, esp. 296f and fig. 19, the Lateran grave relief of the early Antonine period (*Einzelstudien*, no. 2256), with Arimaspoi or Sabazios guarding griffins on either side of busts of the deceased's parents. Curtius identifies the Oriental king on a camel on Attic fourth century B.C. and later terracottas as Sabazios; on Trajan's coins of A.D. 106/7 and later (*BMCCE* III, lxxvii, etc.) the camel is an attribute of Arabia, an area which participated violently in the revolts of Trajan's last days (Dio, *LXVIII* 31).

the Great. There is no evidence that Arimaspes were ever thought of in connection with Balkan peoples, the Germanic tribes, or the Gauls.⁹³

In addition to his earlier, decorative rôle as symbolic of the Persian East, and his Roman funerary rôle as the animal of human apotheosis,⁹⁴ the griffin is the beast of Apollo, particular patron of Emperors from Augustus onwards, and hence symbolic of the sun-like omnipresent majesty of the Emperor.⁹⁵ These animals of ferocious strength represented the imperial *virtus Augusti*, that quality which Emperors under the protection of Apollo, Mars Ultor and the other Augustan state gods, should display when leading the legions for the glory of the Roman state.⁹⁶ It is fully in keeping with these traditions of imperial iconography that the Prima Porta Augustus should include Apollo riding on his griffin on the breastplate.⁹⁷ In Imperial armorial iconography the griffin was the perfect symbol of those qualities an emperor desired to suggest in commissioning cuirassed statues, rather than in ordering those in toga or in the guise of a divinity.

Since the figure on the Fogg cuirass is female, there exists a question whether she is a female Arimaspe or an Amazon. Amazons were well known in Hellenistic and Roman mythology to embody all those warlike qualities of legendary peoples on the eastern fringes of the classical world

which would make them excellent adversaries for the imperial solar griffin. The female adversaries of griffins on fourth century and later vases, metal bowls, and other metalwork objects from the Bosphorus region borrow their iconography from Amazons on earlier Greek vases, and several scholars have regarded them, perhaps rightly, as Amazons rather than female Arimaspes.⁹⁸ Von Rohden termed Amazons the figures fighting griffins on a "Campana"-type architectural terracotta plaque of the first half of the first century A.D. in the Museo Kircheriano.⁹⁹ This plaque is, however, a product of the stimulus to the decorative arts given by the mythological interpretation of the Augustan commemorations and the official deeds of the first Emperor. Other Campana plaques, and coin parallels, will be shown to reflect this official stimulus even more directly. In a language so highly and subtly developed as the iconography of the victories of Augustus, it would be wrong on two major counts to consider the female figures in these Augustan decorative motifs and their conscious reflections in late Trajanic or Hadrianic official art as Amazons rather than female Arimaspes. Monuments such as the Ara Pacis,¹⁰⁰ the base in the Museo Correale (Sorrento),¹⁰¹ the altar of the Gens Augusta from Carthage,¹⁰² and probably even the Prima Porta Augustus¹⁰³ are concerned with artistic parallels to the Vergilian epic in presenting the legend of

⁹³ On the Scythian etymology of the word Arimaspe (= μουνόφθαλμος—ἀριμα γὰρ ἐν καλέουσι Σκύθαι, σποὺ δὲ τὸν ὀφθαλμόν) and the indubitable connection of these peoples in ancient thought with areas occupied at a later date by the Parthian Empire—as opposed to the Dacian regions, see H. H. Schaefer, *Iranica 1. Das Auge des Königs*, AbhGöttingen, Phil.-hist. Kl. 3 Folge, Nr. 10 (Berlin 1934) 17f. The motif of Eroses and griffins in combat, developed from Arimaspe iconography, is found among Hellenistic textiles for the Scythian market, from Noin Ula in Northern Mongolia: H. Schaefer, *AJA* 47 (1943) 269ff.

⁹⁴ K. Lehmann-Hartleben and E. C. Olsen, *Dionysiac Sarcophagi in Baltimore* (Baltimore 1942) 30f.

⁹⁵ F. Dürrbach, in *DarSag* III, 1, cols. 1668ff; A. Furtwängler, in Roscher, *MythLex* I, 2, 1742ff, esp. 1774f; K. Schefold, *Jb. d. Schweiz. Gesellschaft für Urgeschichte* 35 (1944) 146ff, esp. 154f.

⁹⁶ On the imperial virtues, esp. *Virtus*, see M. P. Charlesworth, *JRS* 33 (1943) 1ff; idem, *The Virtues of an Emperor* (London 1937); H. Mattingly, *HTA* 30 (1937) 103ff; C. H. V. Sutherland, *JRS* 28 (1938) 129ff; M. Grant, *Roman Imperial Money* (London 1954) 166ff. The grandest numismatic testimonies of Trajan's Parthian war are those *aes* showing him wearing cuirass and standing in the pose of a cult image of *Virtus*, above a submissive Armenia and between the river gods Tigris and Euphrates: ARMENIA ET MESOPOTAMIA IN POTESTATEM PR REDACTAE (*BMCCRE* III, 221, no. 1035, pl. 42, no. 8 [A.D. 116-117] p. cvi. Here pl. 74, fig. 20.

For reflections of the several cult images of *Virtus* in the major and minor arts, see the list in *NumCirc* 63 [1955] nos. 7-8).

⁹⁷ A. Alföldi, *RM* 52 (1937) 48ff, pl. 17; E. Löwy, *RM* 42 (1927) 209 and older refs.

⁹⁸ So Dürrbach, in *DarSag* III, 1, col. 1672, fig. 366a. For contemporary representations of Arimaspes and griffins on Kertch vases, see K. Schefold, *Untersuchungen zu den Kertscher Vasen* (Archäologische Mitteilungen aus Russischen Sammlungen, 4) Berlin and Leipzig 1934, 153. Dr. D. von Bothmer has kindly supplied an extensive additional list of Amazons and griffins on RF vases. His example of a griffin between two Arimaspes (Stettin 64, pelike. Slg. Vogell, pl. 4, 4) has an *Amazonomachy* on the obverse. The decorative as opposed to the symbolic qualities of these groups of figures have been recently stressed (T. B. L. Webster, *JHS* 73 [1953] 186).

⁹⁹ H. von Rohden, *Architektonische römische Tonreliefs der Kaiserzeit* (Die antiken Terrakotten IV; unter mitwirkung von H. Winnefeld) Berlin and Stuttgart 1911, Part 1, 286; Part 2, pl. xciii, 1.

¹⁰⁰ J. M. C. Toynbee, "The Ara Pacis Reconsidered and Historical Art in Roman Italy," *ProcBritAc* 39 (1955) 76ff.

¹⁰¹ G. E. Rizzo, *BullComm* 60 (1933) 51ff.

¹⁰² B. M. Maj, *RendPont* 12 (1937) 157ff; Rostovtzeff, *RM* 38-39 (1923-24) 281ff; Seltman, *CAH Plates* IV, 134f and further bibl.

¹⁰³ L. A. Holland, "Aeneas-Augustus of Prima Porta," *TAPA* 78 (1947) 276ff.

Rome's derivation from Trojan stock. The Trojan ancestry of the Roman race was no less an artistic topic in the great building programs of Hadrian and in the reflections of Antoninus Pius' commemoration of the nine-hundredth anniversary of the founding of Rome than it was in the Augustan age.¹⁰⁴ It is, therefore, unthinkable that the very Amazons who aided their Trojan cousins against the Greeks should appear in imperial symbolism as the peoples against whom Rome fought to maintain stability on her Eastern frontiers. Amazons could symbolize such Eastern peoples to the Athenians and the Pergamenes,¹⁰⁵ but not to the post-Augustan designers of imperial iconographic themes.

Final proof that the female is an Arimaspe rather than an Amazon comes from a cuirass statue excavated thirty years ago at Pollentia and preserved in the Museo Provincial, Palma de Mallorca. The central composition on the breastplate is identical with that of the Fogg Trajan, save that the adversary is a young male Arimaspe in Eastern garb rather than a female.¹⁰⁶ There is an equally explicit example of this composition on a cuirassed torso from Volubilis,¹⁰⁷ and the best preserved version of the scene, also featuring a male Arimaspe, appears on a Hellenistic-type marble trophy found during the Italian excavations on Rhodes (pl. 74, fig. 21). The Rhodes trophy has been dated by the

excavators in the first century B.C., in the period following Mithridates' wars, and by Sieveking in the Hadrianic period.¹⁰⁸ The Pollentia and Volubilis statues can certainly be placed in the Augustan or Julio-Claudian periods at the latest. Finally, a bearded, trousered male Arimaspe in identical schema occurs on a fragmentary torso excavated in Centuripe. The style is close to the Fogg Trajan; since the pteryges do not continue the specific symbolism of those on the Fogg statue (see below), perhaps we have the remains of a statue set up to Trajan during the Parthian Wars.¹⁰⁹

The enrichment of the heavy leather or metal pteryges gives further important evidence for the dating and interpretation of the Fogg Trajan (figs. 8, 9). The Fogg statue is the only known example of a Hellenistic or imperial cuirass statue in which *bovine skulls as opposed to bovine heads* appear anywhere in the cuirass enrichment.¹⁰⁹ This statue is the only example in which either of these motifs forms the principal, non-floral feature of the enrichment on the pteryges.¹¹⁰

A few observations are in order on the general nature of the decorations found on the pteryges of imperial cuirassed statuary. The tongue-like form of pteryges occurs in its Roman imperial arrangement in double layers as early as the stele of Aristonantes in the third quarter of the fourth century B.C.¹¹¹ The typical Hellenistic thorax, how-

¹⁰⁴ Vermeule, *NumCirc* 62, no. 12 (1954) cols. 485ff; Toynebee, *Roman Medallions* (A. N. S. Numismatic Studies, no. 5) New York 1944, 143f.

¹⁰⁵ As indicated in the so-called second dedication of Attalus, with battles of gods against giants, Athenians against Persians, Greeks against Amazons, and of Pergamenes against Gauls, "the juxtaposition tacitly claimed for both Athenian and Pergamene victories a glory equal to that of the gods" (and the heroes before Troy): A. W. Lawrence, *Classical Sculpture* (London 1929) 295.

¹⁰⁶ A. Garcia y Bellido, "Esculturas romanas de Pollentia" (La Alcudia, Mallorca), *ArchEspArq* 24 (1951) 61f, figs. 12f. For the Julio-Claudian or earlier form of the support, cf. the Claudius in Olympia (Muthmann, *op.cit.* 29, 52, pl. III, fig. 8).

¹⁰⁷ Garcia y Bellido, *op.cit.* 62, note 25 (bibl.), fig. 17.

¹⁰⁸ *ibid.* 62ff, note 24 (bibl.), figs. 15f; esp. also A. Maiuri, *Annuario* 4-5 (1921-22) 243ff, figs. 6f. Sieveking, 91. *Berlin Winckelmannspr.* (1931) 25. The earliest representation of an Arimaspe and griffin in combat in this schema seems to be the Orientalizing agate scarab in London (H. B. Walters, *Cat. of the Engraved Gems and Cameos Greek Etruscan and Roman in the British Museum*, London 1926, 39, no. 320, pl. VI).

^{109a} G. Libertini, *Centuripe*, Catania 1926, 82ff, pl. XVII, 1, illustrated in conjunction with other Trajanic and Hadrianic finds. J. Sautel, *CRAI* (1952) 478ff, figs. 1f; *FaustA* 8 (1953) 233, no. 3131, fig. 69, publishes a torso discovered at Orange in 1952, showing the Fogg Arimaspe in reversed schema. The

torso is in a later Trajanic style, not far from the Fogg statue; animal protomes also appear on the pteryges. Perhaps likewise from a statue of Trajan set up during the Parthian Wars.

¹⁰⁹ The term "bovine skulls" is used to distinguish the varied number of beasts of all ages used in Roman sacrifices. See further, note 145, and: G. Wissowa, *Religion und Kultus der Römer* (*Handbuch der klassischen Altertumswissenschaft*, V, 4), Munich 1912, 412ff; J. Marquardt, *Römische Staatsverwaltung* (*Handbuch der römischen Alterthümer* VI), III (Leipzig 1885) 170ff; H. W. Wright, "The Age of Roman Sacrificial Victims," *Classical Studies in Honor of John Rolfe* (Philadelphia 1931) 321ff.

¹¹⁰ Mancini, *op.cit.* 201 (Sec. D) no. 7, lists five statues with "Bucranl" but all these examples appear to be single bovine heads integrated with other animal protomes (e.g. the "Clodius Albinus" of the Vatican: Amelung, *op.cit.* II, 405, no. 248, pl. 45; L. D. Caskey, *op.cit.* 209, under no. 122). To Mancini's examples we may add the handsome, early Antonine torso from Madauros (Mdaourouch) in the Guelma Museum, where bulls' heads are set at either side of a profiled Medusa head and between Macedonian helmets on the five front pteryges (G. Souville, *Libya* 2:1 [1954] 157ff, fig. 2). See also pl. 74, fig. 22.

¹¹¹ P. E. Arias, *Skopas* (Quaderni e Guide di Archeologia, I) Rome 1952, 144, pl. xvi, 55; H. Diepolder, *Die attischen Grabreliefs des 5 und 4. Jahrhunderts v. Chr.* (Berlin 1931) 52, pl. 50; cf. the traditional cuirass on Ktesikrates in the early fourth century fragment in Paris (Diepolder, 33, pl. 28, 1)

ever, shows the pteryges merely as small, rectangular straps of leather with fringes sewn on the bottoms.¹¹² Some otherwise very elaborate Roman imperial cuirasses affect this simple fashion,¹¹³ but the majority feature in varied degrees of elaboration the type of pteryges seen on the cuirass of the Fogg Trajan.¹¹⁴ This type continues into the fourth and fifth centuries A.D., as scenes on fourth and fifth century medallions,¹¹⁵ the statues on the Capitoline balustrade,¹¹⁶ and the Barletta colossus¹¹⁷ all testify. It may be stated as a rule to which there are few exceptions, that the enrichment of imperial pteryges is purely decorative and has little to do

with the subject matter on the breastplate.¹¹⁸ The bound Eastern barbarian and the captive personified province on the lower centre pteryges of the Hierapytna Hadrian (pl. 73, fig. 17) have been noted as allusions to Hadrian's Eastern settlement of A.D. 117-123.¹¹⁹ The long flaps of the handsome cuirass fragments from Rome in Copenhagen have marine creatures above (Scylla and a sea-lion with Eros on its tail), below a Gallic female (?) and a Gaul carrying a boar signum, all perhaps suggesting the historical cuirass of a statue of Augustus or Agrippa.¹²⁰ A cuirass statue with head of Augustus, from Tusculum and in the Castello di Agliè,

and the many older examples collected by A. Hagemann, *Griechische Panzerung*, I, 20ff, esp. 36ff.

¹¹² As on the trophy from the Rhodes Necropolis: note 109, generally dated first century B.C., and the examples from Pergamon, Kos, and Tenos: Hekler, *JOAI* 19-20 (1919) 192ff, figs. 124f, 129ff, and parallels. Although Sieveking (*loc.cit.*) would place the Rhodes trophaion in the Hadrianic period, Schweitzer (*Die Bildniskunst der römischen Republik*, 65) and Herbig (*Gnomon* 9 [1933] 479ff) placed the Munich statue which formed the basis of Sieveking's monograph about 40 B.C., and we now have the accurately dated Mithradates statue in Delos (102-101 B.C.; F. Chapouthier, *Delos* 16 [1935] 38ff, fig. 50).

¹¹³ As the British Museum "Hadrian" (Hekler, 212ff, fig. 142; A. H. Smith, *Cat.* III, 156, no. 1895) vs. the "Lucius Verus" of the Vatican Galleria delle Statue (Hekler, 213f, fig. 141; Amelung, *op.cit.* II, 661ff, no. 420, pl. 62), the former with Hellenistic pteryges, the latter with an elaborate set of enrichments in mid-first century A.D. style. Mrs. Strong (*JRS* 27 [1937] 118f, pls. xvf) dated the "Lucius Verus" in the Augustan, the "Hadrian" possibly in the Julio-Claudian period, but the style of the drapery in the latter seems Flavian at least. The breastplate of the second, with Victoria bearing a cornucopia to Terra Mater, between a Northern and an Oriental barbarian, is a direct copy of that of the "Lucius Verus."

The transition from the Hellenistic-type cuirass with rectangular leather pteryges to the decorated Roman type is seen in reliefs, such as the Hellenistic figures on the late Republican Civita Castellana basis (Herbig, *RM* 42 [1927] pls. 16f), the Mars of the so-called Ahenobarbus altar in Paris (E. Strong, *Scultura romana* I, 10ff, pl. rv), and the Julio-Claudian relief in the Vatican Magazine with similar scene of imperial sacrifice to Mars (G. Kaschnitz-Weinberg, *Sculture del Magazzino del Museo Vaticano*, Vatican City 1937, 189f, no. 417, pl. LXXVII). Mars and the emperor in this relief both wear plain cuirasses with two rows of small, semi-circular pteryges, seemingly carved so as to suggest enrichment.

¹¹⁴ The shapes of the Fogg cuirass pteryges are exactly like those of the statue from Velleja in Parma (note 16).

¹¹⁵ Toynbee, *Roman Medallions*, pls. xxixff. A number of (dated) medallions and coins of the fourth and early fifth centuries emphasize the currency of the Antonine and later cloth-belted cuirass type of the Lateran Constantine (R. Delbrueck, *Spätantike Kaiserporträts*, Berlin-Leipzig 1933, 117ff, pl. 33; G. Rodenwaldt, *Die Kunst der Antike, Hellas und Rom*, 4th. ed., Berlin 1927, pl. 690) and the Barletta colossus (Rodenwaldt, pls. 694f; *infra*, note 117). Thus, on a series of gold multiples of Constantine I in his later years (Toynbee, *op.cit.*

pl. v, nos. 4-7) the two sons of Constantine flanking the imperial podium wear such cuirasses.

A late fourth century A.D. reverse type of the cuirassed Emperor standing facing, holding labarum in left hand and raising the kneeling Res Publica with the other, shows variations at the hand of the die designer—differences which indicate that the omission of pteryges in later relief design was of as little importance as it appears to have been in earlier centuries. A large silver multiple of Gratianus shows the ordinary reverse of this type, with the broad belt of the cuirass and the pteryges showing clearly (Toynbee, *op.cit.* pl. xxix, 9; so also on a gold multiple of Arcadius: *idem*, pl. xxxii, 7, and one of Theodosius: Toynbee, pl. xxxvi). On two similar gold multiples of Valentinianus II, of this design, one in Paris and the other removed from that collection by the thief (Toynbee, *op.cit.* pl. xxxv, 1, 2), we find the pteryges absent in the first instance and clearly delineated in the second.

¹¹⁶ Constantine Magnus: Delbrueck, *Spätantike Kaiserporträts*, 113ff, esp. 115, pl. 30 (animal heads in profile and rosettes on the pteryges); Constantine II as Caesar: Delbrueck, *op.cit.* 135f, pl. 46 (as previous).

¹¹⁷ Delbrueck, *op.cit.* pls. 116ff; 219ff as Marcianus (? A.D. 450-457); Mancini, *op.cit.* pl. xxvi. The single row of pteryges, of late antique shape, is enriched with Alexandrine-Hellenistic type Medusa masks in the tradition of the Tazza Farnese and Hellenistic gems, a motif which lasts well beyond the Antonine baroque (*AJA* 59 [1955] 354).

¹¹⁸ Mancini (*op.cit.* 201f, Section D: Decorazione dei pendagli) gives a full index of forty types of enrichment and numerical references to his catalogue of cuirasses on which they appear.

¹¹⁹ See note 73.

¹²⁰ See note 79. The marine figures could suggest Agrippa, who was honoured on the Leipzig rostrum, where Victory crowns him with the corona navalis, for his success at Naulochos in 36 B.C. (R. Heidenreich, "Ein Schiffsnabel in der Leipziger Archäologischen Sammlung," *Zur Erinnerung an den Begründer der Leipziger Winckelmannsfeste*, 13. xii. 1930, 4 pp., 6 figs.; S. Reinach, *Répertoire de reliefs*, Paris 1912, II, 66, 2-3) and who appears with Augustus and wearing his corona navalis on coins of Nemausus in Gaul 28 B.C. and later, with a reverse type featuring the crocodile of Actium (M. Grant, *The Six Main (Aes) Coinages of Augustus*, Edinburgh 1953, 116ff and refs., pls. xvff). On the crocodile and Actian symbolism: Heidenreich, *RM* 51 (1936) 337ff, and on the Augustan connections of the Copenhagen fragments: Muthmann, *RM* 51 (1936) 347ff. The cuirassed statue in the Primo Portico of the Palazzo dei Conservatori, with features somewhat reworked

Turin, features the Wolf and Twins on the two central pteryges and figures of conquered provinces flanking; the breastplate shows Centaurs with trophies and bound prisoners below, all suggesting symbolism of a very general sort.¹²¹ In Mancini's catalogue of pteryges ornaments, only one cuirass gives evidence of a complex thematic, metope-like unity of enrichment in the relationship of pteryges to each other—a torso in the Leiden Museum has the Labours of Herakles as enrichment on these parts of the cuirass.¹²²

Of the major "historical" cuirassed statues, the Prima Porta Augustus offers no evidence, for the small section of pteryges visible above the drapery on the right hip shows that they are the fringed

leather straps of the Hellenistic-type cuirasses mentioned above.¹²³ The Cherchel "Augustus" (pl. 74, fig. 19) features a set of pteryges of singularly decorative aspect above a short leather apron—an alternating set of archaic Silen masks above inverted palmettes and Gorgoneia of more elaborate archaic type than that on the upper part of the Fogg breastplate.¹²⁴ The Sabratha *JUDAEA CAPTA* lorica, with its breastplate commemorating the war of A.D. 69-70 (pl. 74, fig. 18), has a set of pteryges carved in the elaborate manner of a number of cuirassed statues in the later first and second centuries A.D.¹²⁵ Leading outwards from the central flap with an unusual scene, of an eagle with a snake in its beak on a rocky landscape,¹²⁶ the Sabratha

to resemble portraits of Augustus and with a prow as support behind the left leg, probably started life as a Julio-Claudian commemoration of Agrippa, similar in this respect to the cuirassed Agrippa of the Ravenna relief, a monument commissioned by his grandson Caligula (supra note 71; H. Stuart Jones, *A Catalogue of the Ancient Sculptures Preserved in the Municipal Collections of Rome, The Sculptures of the Palazzo dei Conservatori*, Oxford 1926, 2f, no. 2, pl. 1).

¹²¹ Mancini, *op.cit.* 188, no. 62, 202, nos. 21, 31; M. Borda, *Monumenti archeologici tuscolani nel Castello di Agliè*, Rome 1943, pls. xxvff, no. 12. On the cosmic and apotheistic significance of the Centaur in Roman decorative art: F. Matz, "Belli Facies et Triumphus," *Festschrift für C. Weickert* (Berlin 1955) 46ff. All published illustrations of the statue are poor.

¹²² Mancini, *op.cit.* 196, no. 129; von Rohden, *Bonner Studien* 6. The Trajanic head now shown on the statue may belong.

¹²³ In addition to the works in notes 46, 77, for the Prima Porta cuirass, see A. Alföldi, *RM* 52 (1937) 48ff; E. Löwy, *RM* 42 (1927) 203ff; F. Studniczka, *RM* 25 (1910) 27ff. The breastplate is itself a document of the development of imperial pteryges (see note 85), for the legionary (whom Polacco, *op.cit.*, Appendix I, identifies as Tiberius) receiving back the standard wears a cuirass with a double row of enriched flaps (cf. the large photograph, P. Gusman, *L'Art décoratif de Rome I*, Paris n. d., pl. 29).

¹²⁴ See note 74f; the appearance and style of these masks and palmettes imitate the type of delicately carved Augustan honeysuckle, palmette, and mask frieze or panelling from a building near the Iuturna in the Roman Forum and preserved in situ and elsewhere throughout Rome (P. Romanelli, *Roman Forum*, 39; Gusman, *op.cit.* II, pl. 90; an unpublished section of this frieze is in the collection of Maj. George Howard, Castle Howard, Yorkshire). The heavier, drier quality of the carving on the Cherchel "Augustus" pteryges could support the Hadrianic dating suggested above.

¹²⁵ See note 73. The pteryges of the Boston torso (see note 43) are of similar size and shape, and show the same detailed imitation of leather stitching around the edges as seen on the Sabratha cuirass, but the closest parallel in selection and treatment of enrichment for the Sabratha torso is in the pteryges of the Olympia Titus (Richter, *PAPS* 95, no. 2 [1951] 190, fig. 53; Hekler, *JOAI* 19-20 [1919] 217ff, fig. 145; Treu, *Olympia III*, pl. LX, 2).

In the Antonine period a type of cuirass develops which lasts throughout later antiquity and which features one row of short pteryges with animal heads and rosettes modelled in very high,

heavy relief, as the late antique examples, supra notes 87ff. This cuirass style gives its first indications in the shape of the pteryges of the Hadrianic series exemplified by the Agora torso (note 68, etc.). An early example of the Antonine type with a single row of pteryges and with the characteristic cloth belt knotted above heraldic griffins on the breastplate is the second cuirassed torso in the Guelma Museum (note 110, fig. 22). Next chronologically are the Dresden statue of Antoninus Pius (M. Wegner, *Die Herrscherbildnisse in antoninischer Zeit*, Berlin 1939, 127, pl. 5), the cuirassed statue of an Emperor found on the Via Imperiale in Rome (*FastI* 1 [1946] no. 1296, fig. 59—although the head is missing above the chin, a trace of the beard remains), the statue of Marcus Aurelius (portrait of ca. A.D. 160) found in Alexandria (Museum no. 3520; Wegner, *op.cit.* 167, pl. 17), perhaps the Vatican Antoninus Pius (Mancini, *op.cit.* pl. xxiii; Amelung, *Vat.Cat.* I, 774f, no. 682, pl. 83), the colossal Lucius Verus from the Forum Novum of Thubursicum Numidarum (Khamissa) (G. Sassy, *Libya* 1 [1953] 109ff, fig. 1), the Boboli Marcus Aurelius (*Einzelaufnahmen* XII, no. 3451), and to move into the fourth century: the Emperor crowned by Roma or Constantinopolis on a major cameo in Leningrad (Delbrueck, *op.cit.* 130f, figs. 32f; G. Bruns, "Staatskameen des 4. Jahrhunderts nach Christi Geburt," 104. *Berlin Winckelmannstr.* 28f, fig. 25).

Analysis of this group of cuirasses and their parallels leads to a conclusion about the dating of a controversial historical relief: the relief from the Ephesus Library, known either as the "Profectio of Divus Traianus" (Toynbee, *JRS* 37 [1947] 188) or the "Apotheosis of Marcus Aurelius" (E. Strong, *La scultura romana* II, 258, pl. 1), cannot itself be earlier than the Antonine period. This would accord well with suggestions that the series of reliefs glorify Hadrian and his family and were executed just before or at the time of his death in the summer of A.D. 138 (Fr. von Lorentz, *RM* 48 [1933] 309, pl. 50). The "Apotheosis" relief must refer to the dedication of the Parthian triumphator Trajan rather than Hadrian, who appears elsewhere (Ryberg, *MAAR* 22 [1955] 133f, pl. 47; *AJA* 61 [1957] 116f).

¹²⁶ This motif is known in art from coins of Elis (ca. 471-421 B.C.) as "the well-known omen of victory sent by Zeus, *Διὸς πέπας αὐτοχόου*" (*Iliad* XII. 211) (B. V. Head, *Historia Numorum*², Oxford 1911, 420) and is therefore most appropriate as the central feature in the secondary enrichment of a *JUDAEA CAPTA* cuirass. See further, R. Wittkower, *JWarb* 2 (1938-1939) 310ff, with extensive documentation.

cuirass has pteryges enriched with a pair of panther masks with inverted palmettes in their mouths, Medusa heads in partial profile, two sets of elephant heads set in profile back to back, and, in the lower row, Macedonian helmets,¹²⁷ rams' heads,¹²⁸ and crossed shields.¹²⁹ These details can all be paralleled extensively on other cuirasses,¹³⁰ and they derive from the same later Hellenistic decorative repertory in metalwork and marble which was adapted in imperial Rome to furniture ornament,¹³¹ to architectural moldings in terracotta and marble,¹³² to cinerary urns,¹³³ and to the large "Piranesi"-type marble vases or candelabra.¹³⁴

While the pteryges of the group of Hadrian's cuirass statues in Olympeia, the Agora (pl. 73, fig. 15), from Cnossus (pl. 72, fig. 16), and elsewhere vary in details, they show a general similarity of style and subject, and none contains any details as specific as those of the Hierapytna statue (pl. 73, fig. 17). Ammon masks, Medusae, helmets of various Hellenistic types, elephant heads, eagles, and the like may suggest the armourial iconography

¹²⁷ Similar to the helmet worn by Seleucus I Nicator (312-280 B.C.) on silver coins struck after the victory of Ipsus in 301 B.C. (Head, *op.cit.* 757, fig. 332; British Museum, *A Guide to the Principal Coins of the Greeks*, London 1932, 50, pl. 27, no. 11).

¹²⁸ The type of the single or linked rams' heads is that known in Greek and Etruscan armorial enrichment since the early fifth century B.C. Its most prominent classical manifestation is the pair on the visor of the helmet worn by the Athena Giustiniani replicas (see T. T. Hoopes, "The Greek Helmet in the City Art Museum of St. Louis," *Studies Presented to David M. Robinson* II, 833ff, esp. 835, note 6, pls. 81ff) and on busts adapted in Roman times from this statuary type (e.g. *Einzelaufnahmen* no. 3852f, in Copenhagen: F. Poulsen, *Cat.* 96, no. 104 and bibl.). A young head, perhaps Perseus of Macedonia (179-168 B.C.), in a herm with Hermes or Perseus (wearing petasus with wings) at Ince wears a royal Macedonian helmet with rams'-head cheek-pieces (B. Ashmole, *A Catalogue of the Ancient Marbles at Ince Blundell Hall*, Oxford 1929, 48f, no. 111).

¹²⁹ This motif is seen in monumental scale in one of the trophy reliefs from the Hadrianum and now in the Cortile of the Palazzo dei Conservatori. In this case an oval and an octagonal shield are shown (Stuart Jones, *The Sculptures of the Palazzo dei Conservatori*, 3ff, 10, no. 10, pl. 4). A closer parallel exists in two octagonal shields on one of the Parthian trophy panels with the Dacia keystone from the Villa Cesii (*ibid.* 16ff, no. 6a, pl. 8). See further, E. Löwy, "Die Anfänge des Triumphbogens," *JKS* 2 (1928) 1ff.

¹³⁰ See notes 118, 125.

¹³¹ e.g. the lion masks on a tripod basin or vase in the Louvre (Gusman, *L'Art décoratif* I, pl. 2).

¹³² See note 124, and the palmettes on a frieze in the Lateran from the Forum of Trajan (Gusman, *op.cit.* pl. 22), the Ammon head in relief on the patera in the Divus Vespasianus temple frieze (*ibid.* pl. 66), and the archaic masks and palmettes on a frieze in the Lateran (*ibid.* pl. 90).

¹³³ e.g. rams' heads and eagles on the corners: cf. the numer-

of Ptolemaic Alexandria,¹³⁵ but these enrichments do not elucidate the Hadrianic Roma Aeterna themes of the breastplates in more than a very general way.¹³⁶ When these motifs are linked with breastplates such as that of the Boston torso (pl. 72, fig. 10), on which Victoriae of Neo-Attic type dance before a Palladium, the symbolism of the pteryges contributes nothing to possible connections of the principal scene with Domitian's cult of Minerva.

A cuirass statue of Trajan with a late or posthumous portrait, with a stance recalling that of the Prima Porta Augustus, with a breastplate containing scenes alluding to imperial victories in the East, and with the unique motif of bucrania forming the major enrichment of the pteryges, suggests need of an enquiry as to how the bucranium motif can be related to the other aspects of the statue. The fact that instances where the symbolism of the pteryges relates to the breastplate are very few only serves to set off the individuality of the Fogg bucrania and therefore to underline their importance.

ous examples discussed and illustrated by W. Altmann, *Die römischen Grabaltäre der Kaiserzeit* (Berlin 1905) 68ff, esp. 79, fig. 66 (eagles below rams' heads); Ammon heads on the corners: *ibid.* 88ff, esp. 89, fig. 74 (an eagle with wings spread in the centre).

¹³⁴ e.g. the Silen masks on a marble candelabrum in the Villa Borghese (Gusman, *op.cit.* pls. 20, 35) and on the handles of a vase in the Museo Capitolino (*ibid.* pl. 64); the rams' heads on a candelabrum in the Vatican (*ibid.* pl. 124); and the archaic masks on a decorative column also in the Vatican (*ibid.* pl. 55). Frontal Ammon masks appear on the obverses of circular marble oscillia (as the example in Tegel: *Einzelaufnahmen* no. 2996).

¹³⁵ The Medusa head on one of the Julio-Claudian or Flavian Laursfort phalerae has been compared to the Medusa head of the Tazza Farnese with its Alexandrine subjects (Selman, *CAH* plates, IV, 142 b and refs.). An Ammon head, a fulmen, and a rosette enrich the helmet of Ptolemy II Philadelphus on the well-known large cameo in Vienna (A. Furtwängler, *Die antiken Gemmen*, Berlin-Leipzig 1900, II, 250ff, III, pl. 131; F. Eichler, E. Kris, *Die Kameen im Kunsthistorischen Museum*, Vienna 1927, 47f, no. 3, pl. 1). The type of eagle on Flavian to Hadrianic pteryges appears on the large sardonix in Vienna with busts of Claudius and family springing from cornucopiae (*CAH* Plates, IV, 158 b and refs.). Another Laursfort phalera is in the form of an Ammon head (G. Q. Giglioli, *Museo dell' Impero Romano*, Rome 1929, 35, pl. xviii; cf. pl. xx, the cenotaph of Caelius in Bonn where such objects are worn).

¹³⁶ The form of the heraldic eagle on the lower part of the breastplate (as on the second Guelfa torso [note 110]) or on the pteryges (as on the Hierapytna and Agora statues) suggests the military symbolism of the legionary eagle, as on one end of the marble sarcophagus discovered in 1947 in the Piazza Matteotti in Modena (*Fatti* 2 [1947] no. 2681 [Arias]). This architectural sarcophagus of sub-Alpine type is dated in the Antonine period. The other end has a similar eagle as an aquila between two manipular standards.

The importance of this motif becomes evident when we observe that there are few occurrences of the bucranium in Roman art after the Augustan Ara Pacis (9 B.C.) that cannot be shown to have a funerary connection or context. Furthermore, after the Augustan age bovine heads, as opposed to bovine skulls, appear in hardly more than one partial instance in the Latin West in a purely funerary connection. This instance occurs in the period of Hadrianic classicism, in the enrichment of the Mausoleum of Hadrian in Rome, where bucrania adorned the frieze of the rectangular base while bulls' heads probably decorated the frieze of the circular drum.¹³⁷ Finally, instances of use of the bovine skull as opposed to the bovine head in major carved enrichment, architectural and otherwise, in Greece and the Hellenistic East are generally confined to the period between the later fourth century B.C. and the termination of the major Hellenistic kingdoms with the advent of Rome in the later second and first centuries B.C. Their significance seems to be purely ritual and decorative rather than sepulchral.¹³⁸

The conclusion which we may draw (from illustration of this thesis, in conjunction with ma-

terial already presented) is that the Fogg Trajan is a statue set up to honour the Optimus Princeps as victor over Parthia and Armenia, in the years shortly following his untimely demise, the years when his successor Hadrian based the strength of his own imperium on systematic commemoration of his predecessor's acts and memory.

The earliest datable appearance of bucrania on an imperial document is the coinage of Augustus, struck at an uncertain mint probably in the East ca. 20 B.C. (pl. 75, fig. 29, no. 2). The candelabrum in the centre of the reverse design has been seen as an allusion to the sacred fire borne in procession before Augustus,¹³⁹ but the association may be funerary, for connections with commemoration of the dead (Julius Caesar?) have also been noticed.¹⁴⁰ On these aurei and denarii the two bucrania appear above two paterae in the garland surrounding the candelabrum.

The presence of bucrania supporting the carved garlands on the inner precinct wall of the Ara Pacis Augustae stems both from the character of Roman state sacrificial ceremonies and the considerations which led to the construction of the Augustan altar and its setting. Research over the last fifty years

¹³⁷ D. E. Strong, "Late Hadrianic Architectural Ornament in Rome," *PBSR* 21 (1953) 142ff (Appendix I. "The Decoration of the Square Base of the Mausoleum of Hadrian"). Like later antiquarians Cinquecento architects spoke of *testi di bue* without distinguishing *bucrania* from *bovine heads*. Witness the tomb of Caecilia Metella, known as *capo di bue* in the Renaissance. A cassone of ca. 1440, by the Anghiari Master (perhaps the Castagno follower Giov. di Francesco del Cervelliera da Rovizzano, d. 1459) and in the Ashmolean Museum, Oxford, shows the city of Rome in the left rear of a scene based on Livy V, 40-42, the flight of the Vestals at the Gallic sack of Rome. Castel Sant'Angelo appears beside the Aurelian Wall extension as a turreted circle on a square base, the upper part of which possesses cornice, frieze and architrave with *bucrania* and garlands below (P. Schubring, *Cassoni. Truhen und Truhenbilder der italienischen Frührenaissance*, Leipzig 1923, 107f, pl. xix, no. 108). Castel Sant'Angelo with square base enriched with bucrania also appears in Giulio Romano's fresco ca. 1520 of the Vision of the Cross, in the Sala di Costantino of the Vatican (A. Venturi, *Storia dell' arte italiana*, IX, Part 2, Milan 1926, 350ff, fig. 286). A scene on the bronze doors of St. Peter's, ca. A.D. 1433-1445, reverses the decoration, placing bucrania on the circular drum and bovine heads on the square base (M. Lazzaroni, A. Muñoz, *A. Filarete, scultore e architetto del sec. XV*, Rome 1908, pl. iii). The MSS of Johannes Marcanova of Padua (ca. 1410-1467) are further examples of the Renaissance confusion in representing garland friezes. In his fanciful reconstructions Marcanova uses Cupid heads with garlands in a number of views of monuments in Rome (e.g. *MAAR* 6 [1927] pls. 24, Monte Testaccio, 28, Vatican obelisk, 29, Baths of Diocletian, 31, Castel Sant'Angelo, 32, Tarpeia), but he saw bucrania on the tomb of Caecilia Metella (*op.cit.* pl. 34).

¹³⁸ Bucrania support garlands in the enrichment of the orthostate blocks from the "Honourific Tomb" (heroön) or altar of the Bouleuterion at Miletus. The Bouleuterion was constructed by Antiochus II between 166 and 164 B.C., but the heroön, in which were found fragments of a sarcophagus, belongs to the Roman period and may be evidence for the penetration of Roman funerary motifs into the Eastern provinces (Mendel, *op.cit.* III, 493f, nos. 1282f). Examples belonging to the Hellenistic period comprise the propylaea at Epidaurus (late fourth century or later: W. B. Dinsmoor, *The Architecture of Ancient Greece*, London-New York 1950, 286, note 3), stylobate blocks of the Arsinoeion on Samothrace (289-281 B.C.: A. Conze, A. Hauser, G. Niemann, *Archaeologische Untersuchungen auf Samothrace I*, Vienna 1875, 79ff, pls. LXff), and the frieze of the Ptolemaion also on Samothrace (280-265 B.C., now in Vienna and Istanbul: Conze, Hauser, O. Benndorf, *Neue archaeologische Untersuchungen II*, Vienna 1880, 41ff, pls. xxxviii; Mendel, *op.cit.* III, 431f, nos. 1185ff; also, for both monuments: K. Lehmann, *Samothrace*, New York 1955, 25, 49ff, fig. 12, 73f). An altar with bucrania, in the Athens National Museum, is of Roman imperial date (Altmann, *op.cit.* 3, fig. 1; see also note 155).

Bulls' heads first appear in the fourth to third century B.C. in bracket capitals inspired by the Persian capitals of Susa and Persepolis (in the Agora at Salamis in Cyprus: Dinsmoor, *op.cit.* 290f; E. von Mercklin, *RM* 60/61 [1953/54] 186ff, pls. 80ff) and in triglyph carving giving the effect of supporting a cornice (in the Stoa of Antigonus at Delos, erected ca. 254 B.C.: Dinsmoor, 291f). Cf. also the frieze in Istanbul, from the area of the theatre at Pergamon and dated third or second century B.C. (Mendel, *op.cit.* III, 430f, no. 1184).

¹³⁹ L. R. Taylor, *The Divinity of the Roman Emperor* (Middletown [Conn.] 1931) 194ff.

¹⁴⁰ *BMCCE* I, cxxvif, 110f, pl. 17, nos. 14f.

into the decorative character of the Ara Pacis has established fairly conclusively the thesis that the altar complex of 9 B.C. is a permanent version of a temporary wooden structure of 13 B.C.¹⁴¹ The presence of bucrania in this commemorative rather than funerary monument is but a permanence of the skulls and garlands which adorned the structure put up for the ceremonies and was given a lasting, accurate memorial in the marble altar and precinct completed four years later.

Ox-skulls were already firmly established in the decorative repertory of Roman tomb carving about the middle of the last century of the Republic: they appear with garlands and rosettes on the tomb of the Plebeian Aedile C. Publicius Bibulus, restored (?) or erected at the foot of the Capitoline Hill.¹⁴² Midway in technique between the heavy garlands of the Bibulus tomb and the delicate Hellenistic carving of the Ara Pacis is the frieze of swags suspended from bucrania on the tomb of Cecilia Metella, daughter of Q. Creticus and wife of a certain Crassus. This tomb is generally dated about 20 B.C.¹⁴³ It is not coincidence that the only Roman garland sarcophagus of generally accepted Julio-Claudian date, the Caffarelli sarcophagus in Berlin (pl. 73, fig. 23), has three bucrania supporting the two delicately carved swags of fruit and flowers on its principal panel. The sarcophagus seems, furthermore, a rarity in an era when such funerary monuments consist almost entirely of cineraria of various types rather than sarcophagi.¹⁴⁴

¹⁴¹ A thesis recently restated by Prof. J. M. C. Toynbee (*Proc BritAc* 39 [1955] 71ff).

¹⁴² S. B. Platner and T. Ashby, *A Topographical Dictionary of Ancient Rome* (Oxford 1929) 477; G. Lugli, *I monumenti antichi di Roma e suburbio* III (Rome 1938) 262ff, fig. 56; Ducati, *L'Arte in Roma*, pl. xxix; *Consociatione Turistica Italiana* IX, Roma 1 (Milan 1941) 37, fig. 27. C. Publicius Bibulus is either unknown or was Tribune of the Plebs in 209 B.C. (T. R. S. Broughton, *The Magistrates of the Roman Republic*, New York 1951, I, 342, II, 609).

¹⁴³ E. Strong, *Art in Ancient Rome* (New York 1928) 136, fig. 155; D. S. Robertson, *A Handbook of Greek and Roman Architecture* (Cambridge 1945) 266; *CIL* VI, 1274. B. Götz dates the tomb 50 B.C. (*Das Rundgrab in Falerii*, Stuttgart 1939, 10f, 13, 15f, 18f, etc., fig. 14). The transition from Hellenistic bulls' heads to Roman bucrania in the last years of the Republic is discussed in A. E. Napp, *Bukranion und Guirlande*, Heidelberg 1930, 4-20. The interest taken by Romans of the early Empire in bucrania rather than bovine heads is summed up in the lifesize marble bucranium now preserved on the wall of the Convent in Grottaferrata (photograph from Dott. E. Paribeni).

¹⁴⁴ J. M. C. Toynbee, *The Hadrianic School* (Cambridge

Recent research has re-emphasized the close relationship of the form and decoration of the Claudian Ara Pietatis Augustae to its prototype of 9 B.C.¹⁴⁵ The fact that the decorative swags of laurel leaves and berries on the Claudian altar precinct are tied to candelabra instead of bucrania may indicate that the candelabra were regarded as the same parallels in sacrificial ritual to bucrania that they are on the Augustan coins mentioned previously. The increased funerary connotation of bucrania may have rendered them inappropriate on an altar dedicated to imperial piety, unless the cult connotations of the Julio-Claudian house are involved. Funerary connotations of the bucrania are possibly implied in the Julio-Claudian altar of Manlius, from the theatre at Caere and now in the Lateran,¹⁴⁶ if the sacrifice offered to the Genius Augusti suggests inclusion of Divus Augustus Pater in these honours. The altar cannot date before A.D. 10-12, since the cult image of the temple of Concord dedicated at that time in the name of Tiberius and his dead brother Drusus appears in high relief on the back of the altar.¹⁴⁷ The presence of bucrania above the utensils of sacrifice on the short sides of the altar in the temple of Vespasian at Pompeii indicates that at this date bucrania were appropriate in the commemoration of sacrifices to the Genius of the living Emperor, provided that the evidence of bull rather than steer (appropriate to a divus) in the sacrificial scene testifies to the accuracy of the sculptor in recording ritual and that the recutting of a monument possibly Augustan has not left the en-

1934) 203, 229, pl. LV, 2 and refs.; Seltman, *CAH* Plates IV, 124 (c). Rodenwaldt, in the basic publication (82 *Berlin Winckelmannspr.* 1925), dated the sarcophagus in the Tiberian period, but Seltman favours a Claudian date for this carving that he terms "indubitably Roman." The sarcophagus of Raphael, in the Pantheon, also features bucrania, but a date at the beginning of the Empire (Rodenwaldt) or in the second century A.D. (Toynbee, *op.cit.* 229, pl. LV, 3) does not minimize the rareness of its shape or the value of its Roman provenance. Rodenwaldt (*op.cit.* 25f, figs. 17f) does not explain his date of A.D. 18 for the altar with bucrania and garlands in Naples, inscribed GENIO.HVIC.DEC/SACRVM.

¹⁴⁶ I. S. Ryberg, *Rites of the State Religion in Roman Art* *MAAR* 22 (1955) 67.

¹⁴⁷ *Ibid.* 84ff, pls. xxvi.

¹⁴⁸ Platner and Ashby, *op.cit.* 137ff, esp. 139; *BMCCRE* I, cxxxviii, 137 no. 116, etc.; D. F. Brown, *The Temples of Rome as Coin Types* (A. N. S. Num. Notes and Monogr. 90), New York 1940, 14ff; L. R. Taylor, *AJA* 25 (1921) 387ff; M. Bernhart, *DJbNum* 1 (1938) 146f. The image appears before its temple on an inscribed relief in the Galleria delle Statue of the Vatican (Amelung, *op.cit.* II, 611ff, no. 401a, pl. 53 [where it is misnumbered 393a]).

richment of these short sides unrelated to the principal scene.¹⁴⁸

A major imperial monument of the period exactly contemporary with the destruction of Pompeii, however, shows the bucranium firmly established in the principal enrichment of a structure dedicated to two deceased and deified emperors. Bucrania alternate with priestly insignia and sacrificial utensils in the frieze of the side façade of the temple of Vespasian and Titus in the Roman Forum. Although a Severan restoration of the temple was recorded in the recut architrave of the front, the surviving section of entablature clearly belongs to the period of Titus (A.D. 79-81) or the early years of Domitian.¹⁴⁹

Numerous Roman marble cinerary chests or urns (cineraria) of the Flavian through the earlier Hadrianic periods provide testimony to the complete establishment of bucrania in a purely funerary context at this time, whatever doubts may have existed concerning their role in Augustan and Julio-Claudian decoration.¹⁵⁰ Such Hellenistic decorative motifs as rams' heads, Ammon heads, Erotes, and, as a result of the Augustan commemorative cycle, victories, appear on the corners of these urns,¹⁵¹ but bucrania always replace bovine heads in all possible cases. A chest in the Museo Nuovo on the Capi-

toline, without inscription but dated in the Julio-Claudian period, presents the unusual feature of a garland of fruit and leaves suspended from three bucrania, two of which are set at the rectangular corners of the monument.¹⁵² Another example in the same collection, with inscription and style dating to the later Trajanic or earlier Hadrianic period, has garlands suspended from two goat heads on the corners and a bucranium in the centre.¹⁵³ The ancient lid of a later second century sarcophagus from the Valle-Capranica collection in Rome and now with the Townley Marbles in the British Museum shows the bucranium motif complementing a scene highly funerary in nature (pl. 72, fig. 24). The sarcophagus front shows the deceased, a young girl, laid out on a couch surrounded by members of her family and attendants, all in exaggerated attitudes of mourning; on the front of the lid three bucrania support garlands and fillets.¹⁵⁴

The constant use of bucrania on Roman cineraria and sarcophagi is all the more striking when we recall that sarcophagi made in Greece and Asia Minor in the second and third centuries A.D. follow the other Hellenistic decorative tradition, and bucrania occur, instead of the complete heads of oxen, bulls, and other animals, only in isolated later examples perhaps made for Roman patrons or at

¹⁴⁸ Ryberg, *op.cit.* 81ff, pls. xxvf.

¹⁴⁹ Platner and Ashby, *op.cit.* 356; K. Lehmann-Hartleben, *BullComm* 62 (1934) 93, fig. 2; *CIL* VI, 938; Strong, *La scultura romana* I, 129, pl. xxvi.

The upper enrichment of a round tomb of the later first century A.D. has been confidently published as belonging with the Flavian Haterii tomb reliefs (Gusman, *op.cit.* II, pls. 114f), but these fragments, including handsomely fashioned bucrania and a garland (and dolphins), are said on more reliable authority to have been found near Vicovaro (Götze, *op.cit.* 12; idem, *AA* 1935, col. 342, fig. 3; O. Benndorf, R. Schöne, *Die antiken Bildwerke des Lateranenischen Museums*, Leipzig 1867, 219, no. 344a). A bucrania frieze of similar date probably also derives from a tomb structure (Gusman, *op.cit.* pl. 3). So perhaps does the frieze in the Museo Capitolino with bucrania, naval emblems and sacrificial implements, since it comes mainly from San Lorenzo fuori le Mura (J. W. Crous, *RM* 55 [1940] 65ff and older refs.). The surviving parts of the frieze of the temple of Vesta in the Roman Forum are later Augustan, explaining the presence of bucrania amid emblems of sacrifice there; the mouldings on the coffering blocks above and the remaining fragments of the base, however, belong to the Severan reconstruction (cf. Ch. Huelsen, *The Roman Forum*, Rome 1906, 186ff, figs. 107f; G. Lugli, *Roma antica, Il centro monumentale*, Rome 1946, 205ff). The bucrania on the temple of Apollo in Campo ("Sosianus") are, of course, earlier Augustan at the latest (cf. A. M. Colini, *BullComm* 68 [1940] 24ff, figs. 16, 20; refs. in Ryberg, *op.cit.* 145f).

¹⁵⁰ Altmann, *op.cit.* 59ff (twelve examples, commencing in

the Augustan period). Bucrania, patera and garland friezes on large statue bases of the second century A.D. may well indicate that they were designed for a posthumous commemoration (e.g. the Hadrianic example in the Palazzo Pitti: *Einselaufnahmen*, no. 3721, and the various examples in the Louvre: Reinach-Clarac, *Répertoire de la statuaire* I, 120ff).

¹⁵¹ See note 133; Victories and Erotes: Altmann, *op.cit.* 101ff, esp. no. 83, fig. 85 (the ash urn of C. Clodius Primitivus and C. Clodius Apollinaris, with Victoriae opening the carved portals on the front: Lehmann-Hartleben, *BullComm* 62 [1934] 118f, fig. 19).

¹⁵² D. Mustilli, *Il Museo Mussolini* (Rome 1939) 157f, no. 26, pl. xcvi, 361. The form and enrichment of the altar with bucrania in the Terme (Strong, *Scultura romana* I, 50f, fig. 29) "un vero trionfo dello stile illusionistico augusteo" is a better candidate for Flavian forerunner of the majority of these urns than the Ara Pacis frieze.

¹⁵³ Mustilli, *op.cit.* 156, no. 22, pl. xcvi, 360.

¹⁵⁴ Smith, *Cat.*, III, 325f, no. 2315; J. Liversidge, *Furniture in Roman Britain* (London 1955) 7, 30, etc., fig. 17. Cf. also the sarcophagus with griffins, ca. A.D. 120, in the Fitzwilliam Museum, Cambridge (given by Lord Carmichael, 1920); the lid features bucrania and garlands, with sacrificial implements in the four intervening areas. We may see the bucrania on the ends of a well-known, late Antonine battle sarcophagus in the Museo Nuovo Capitolino as providing the symbols of victory and the "triumphal" sacrifice to Nemesis with a *mors in Victoria* connotation (Ryberg, *MAAR* 22 [1955] 168, pl. 61; Mustilli, *op.cit.* 100f, no. 8, pl. lx).

least under the influence of Roman taste.¹⁸⁸ The conclusion we may draw from this survey of the bucrania is that their meaning is funerary and that their use indicates that the Fogg Trajan is not only a posthumous statue of the Emperor but one most likely set up somewhere in the Latin West, probably in Italy.

These observations on the funerary nature of bucrania in Roman art of the second century A.D. lead to conclusions concerning two sets of triumphal sculptures executed during this period. A garland suspended from two bucrania adorns the relief surface of the *ferculum* with Parthian captives and a trophy in a relief fragment showing a triumphal procession, from the Boncompagni-Ludovisi collection and now in the Museo Nazionale Romano (pl. 75, fig. 25).¹⁸⁹ Until recently scholars have been nearly unanimous in dating this fragment in the later Antonine period, generally in the period of monumental Aurelian sculpture (ca. A.D. 165-180). An attempt to associate this relief with honours offered by the Senate to Septimius Severus for his Parthian successes in A.D. 195 has not met with approval;¹⁹⁰ the style and the details of carving are clearly too early to place this relief with what we know of monumental Severan art. The obvious suggestion remains that the Eastern barbarians on the *ferculum* indicate commemoration of the Parthian and Armenian wars of A.D. 163-166; in the last year Lucius Verus returned from the East, and Marcus Aurelius shared his triumph on 12 October of that year.¹⁹¹ The relatively small

size of the relief is striking, as if it had come from an arch or monument smaller than the usual Trajanic, Hadrianic, or Antonine triumphal structures.¹⁹²

The late Franz Cumont restudied a small zoccolo or column base from a triumphal monument and now in the Villa Borghese. He linked this base with two similar bases in the small, early Christian church of SS. Nereo e Achilleo near the Baths of Caracalla, a church renovated by the Cardinal Baronius in A.D. 1597. The bases show Eastern barbarians bearing offerings; their style is clearly that of the third quarter of the second century A.D.¹⁹³ An *Arcus Divi Veri* is known to have stood in the first region, in the area near SS. Nereo e Achilleo and possibly on the Via Appia.¹⁹⁴ From size, style, and iconography it would be quite plausible to attribute the Boncompagni-Ludovisi relief as well as the three, or possibly four, bases to this destroyed arch. Lucius Verus died in A.D. 169, and honours were paid to his deified memory almost immediately. In the light of the funerary connections of bucrania in other late first and second century monuments, an allusion to funerary commemoration in a sculptured representation of Parthian triumph seems most appropriate on an arch finished in memory of a man whose greatest claim was the titles *Armeniacus Parthicus Maximus*. It is also quite possible that the presence of bucrania in the Boncompagni-Ludovisi relief settles the doubt left by the silence of antiquity as to whether or not the arch to Lucius Verus was even

¹⁸⁸ See note 138. Examples of sarcophagi: (Chatsworth, probably from Smyrna) *AJA* 59 (1955) 132, pl. 41, fig. 5; (Bryn Mawr College lawn, from Girard College and Beirut) *CIL* III, 1, 15*, p. 32*, III, Suppl. 1, 6694; (No. 1180, Nat. Museum, Athens) Toynbee, *Hadrianic School*, pl. 11, 2; (Tripoli, N. Africa, and in Istanbul) Mendel, *op.cit.* III, 403ff, no. 1164, also nos. 1165f.

Bulls' heads outnumber bucrania among the few examples of Greek altar-like sepulchral monuments of the imperial period: e.g. nos. 2285-2287 in the British Museum (Smith, *Car.*, III, 292ff). The example with ox-skulls is "probably from Delos" (no. 2285); one of the other examples (no. 2287) is an Elgin marble. No. 2324 (Smith, 332f), a large marble sarcophagus with ridge-shaped lid, from Hierapytna and possibly first century A.D., is said to have faintly indicated ox-skulls at the angles. Late second or third century examples in Asia Minor with softened, stylized bucrania include one of the sarcophagi found over a decade ago on a sepulchral way at Perge in Pamphylia (Mansel, *FestA* 2 [1947] 231ff, no. 2064, fig. 47). Most of the names in the Greek inscriptions post-date the *Constitutio Antoniniana*; the Bryn Mawr sarcophagus with its Latin inscription in memory of a follower of Julia Domna's Emesene house (Julia Mamaea) is testimony to Latin sepulchral influences in the Eastern Mediterranean in the Severan period. The purely

decorative aspects of bulls' heads are further stressed by their use around a water trough of the imperial period at Ephesus (J. Keil, *Führer durch Ephesos*, OAI, 3d. ed., 1955, 62f, fig. 35).

¹⁸⁹ Strong, *Scultura romana* II, 295, fig. 180; idem, *Art in Ancient Rome* II, 117f, fig. 420; Levi, *Barbarians on Roman Imperial Coins and Sculpture* 22, and esp. notes 3f, pl. ix, 5.

¹⁹⁰ L. Budde, *Severisches Relief in Palazzo Sacchetti*, *Deutsches Arch. Inst.* (Berlin 1955) 62ff, pls. 8f, figs. 64f, esp. p. 64, note 94. The traditional dating has been reaffirmed by F. Matz, in his review of Budde's work (*Gnomon* 27 [1955] 539).

¹⁹¹ *BMCCRE* IV, cliif; W. Weber, *CAH* XI, 348f.

¹⁹² See G. Cultrera, *BdA* 3 (1909) 6ff. Dimensions of 0.94m. height and 1.03m. width are quite small considering we possess what appears to be most of the height of a major triumphal relief panel, possibly one of the reliefs from the passageway of an arch (since the long dimension was composed of more than one slab of marble: *ibid.* 7, note 3).

¹⁹³ Cumont, *MemPont* 3 (1932) 82ff. The present writer will suggest elsewhere that Dal Pozzo-Albani drawings, Windsor nos. 8218-8220 (from Cassiano dal Pozzo's mid-Seicento collection) reproduce the three faces of another, now lost zoccolo from this series.

¹⁹⁴ Levi, *op.cit.* 22, note 4; Platner and Ashby, *op.cit.* 47.

commenced before his death and deification. The fact that the whole *ferculum* ensemble, including trophy and prisoners as represented in relief, was undoubtedly copied from a processional image rather than a real group increased the commemorative potential of the *ferculum* decoration.¹⁰²

In the light of these suggestions about the Ludovisi triumphal relief fragment, a detail on the arch of Trajan at Beneventum clarifies the interpretation of the attic reliefs as documents of imperial policy in the crucial period when Hadrian was consolidating control of the Empire. As is well known, the small frieze following the broken lines of entablature around the entire arch below the attic contains a continuous scene of an imperial triumphal procession (pl. 75, fig. 26). This procession includes the imperial quadriga led by Virtus, prisoners in carts, animals decked for sacrifice, and a series of *fercula* on which are borne various objects including the golden crowns presented to the Emperor for his victories.¹⁰³ Each one of these *fercula* is enriched on its visible side with garlands suspended from three bucrania in a recessed panel. It has been argued that this processional frieze, as well as one of the lower reliefs, commemorate the ceremonies of Trajan's Dacian triumph of A.D. 106, the termination of the second war.¹⁰⁴ Since the whole arch portrays events late in Trajan's reign and since bucrania are prominently displayed on the *fercula*, the triumph represented in the small frieze seems more likely to be that awarded Trajan posthumously for his victories over a multitude of

Eastern nations than that already adequately commemorated a decade before.¹⁰⁵

We may now return to the parallel of Augustan and late Trajanic-early Hadrianic commemoration of events on the Eastern frontier implicit in the principal composition of the Fogg cuirass. Since Friedrich Hauser investigated Neo-Attic reliefs nearly seventy years ago, the relation between Neo-Attic marbles, so-called Campana architectural terracottas, and early imperial cuirass enrichment has been well known.¹⁰⁶ It can be confidently demonstrated that late Hellenistic and especially Augustan marble carvers in the Greek style, designers of terracotta compositions, and artists who designed the major imperial metal cuirasses copied by the sculptors of commemorative loricae in marble drew on a common fund of motifs such as griffins flanking candelabra (pls. 72, 73, figs. 12, 13), Kalathiskos or Laconian dancers (or similar Nikai) before a Palladion (pl. 72, fig. 10), Korybantes with the infant Zeus, Victoriae slaying bulls (pls. 73, 75, figs. 14, 29, no. 8), and Arimasps with griffins (pls. 72, 74, figs. 8, 21), to cite at random.¹⁰⁷ Gem carvers also drew on this repertory.¹⁰⁸

There is evidence, however, that many of these motifs are topical, that they were developed in the Augustan age when art received the same sense of new direction which the transition from *imperium* to *auctoritas*¹⁰⁹ imparted to the state religion, to politics, to architecture, and to the concept of Empire as a whole. Furthermore, the search for a new imperial iconography to match Augustan

¹⁰² Cultrera, *op.cit.* 9ff.

¹⁰³ See above, notes 50ff; Pietrangeli, *op.cit.* pls. xxxviii; Ryberg, *op.cit.* 150ff, pls. Lrvf, esp. 152. Mrs. Ryberg observes that the relief depicts a triumphal procession from the Temple of Jupiter Capitolinus to the Porta Triumphalis.

¹⁰⁴ Ryberg, *op.cit.* 155, pl. lv, fig. 83.

¹⁰⁵ See note 53, etc. It is difficult to judge from the iconography of the barbarian captives in this frieze. They appear to wear neither Dacian nor Parthian caps, and, in keeping with what has been said concerning the Hierapytna statue of Hadrian, the symbolism may embrace Eastern peoples as a whole, Parthians, Armenians, Arabs, Jews, and the peoples (whose names the Senate scarcely knew) on Trajan's farthest routes of march. Cf. also the useful detailed photograph: *Faust* 4 (1949) no. 3814, fig. 72. Dacians, of course, appear capless on the Great Trajanic Frieze (Ducati, *L'Arte in Roma*, pl. cxxiv), on the Column of Trajan (Ducati, pls. cxxf), and in the Vatican bust (idem, pl. cxxvi). The Parthian standard bearer in the right spandrel of the triple arch at Pisidian Antioch (A.D. 212) is also without his cap (Levi, *op.cit.* 8, pl. II, 2), as is likewise the similar figure in the centre of the Prima Porta cuirass.

¹⁰⁶ Fr. Hauser, *Die neu-attischen Reliefs* (Stuttgart 1889) 128ff.

¹⁰⁷ Richter, *PAPS* 95 (1951) 188ff, provides discussion and illustration of a number of examples. The coin of Trajan illustrated in the lower left of pl. 74, fig. 20 may be adduced as evidence for the existence of metal ceremonial cuirasses. The breastplate, although abraded where detail is highest, displays the motif common to marble cuirasses showing Victoriae placing shields on a trophy (e.g. one of the two torsii in the Giardino Colonna and the antique breastplate of the St. George on the Piazzetta in Venice: Sieveking, 91 *Berlin Winckelmannspr.* 21f, fig. 5, dated in the late Trajanic period). Mattingly (*BMCCRE* III, 192, no. 911) dates the dupondius A.D. 104-111; Trajan must have received the cuirass among the honours following the second Dacian war.

¹⁰⁸ e.g. the late Hellenistic-Roman carnelian in Berlin, showing a young Arimaspe pouring an offering for a griffin (A. Furtwängler, *Königliche Museen zu Berlin, Beschreibung der geschnittenen Steine im Antiquarium*, Berlin 1896, 255, no. 6877).

¹⁰⁹ The phrasing is borrowed from Prof. M. Grant's monumental work on Augustan numismatic policy: *From Imperium to Auctoritas, A Historical Study of Aes Coinage in the Roman Empire 49 B.C.-14 A.D.* (Cambridge 1946).

policy led to invention of new compositions and motifs which were to be revived and elaborated down through the imperial ages by those who wished to recall quite consciously the deeds of the first Emperor. Augustus' Parthian and Armenian settlement of 19 B.C., no less than the shield and laurels presented to Augustus in 27 B.C., was an occasion of great stimulus to the arts.¹⁷⁰ To the interest in Parthian affairs from Carrhae onwards and to the successes magnified by Augustus out of the Parthian settlement¹⁷¹ we owe demonstrably the increase of Eastern motifs in Neo-Attic art, especially in Campana-type plaques with their freedom of design and ease of production. The fact that the Fogg cuirass perpetuates a particular Neo-Attic type of motif with Eastern allusions is less a testimony to the continuity of such art in the first two centuries of Empire than an indication recognizable to the Romans that Trajan was honoured as the Emperor who finally resolved the greatest external problem of the age of Caesar and Augustus.

To support the thesis that the popularity of Arimaspe and griffin compositions in Campana plaques,¹⁷² and thus on the prototype for the Fogg cuirass motif, stems from the influence of Augustan policy on the minor arts, we may cite a number of parallel instances of the descent of the iconography of the Parthian settlement into Augustan and later minor arts. A large, white glass paste of late Republican to Augustan type in the Berlin collection shows kneeling Parthians presenting the Carrhae

and other standards to the image of Victory which Augustus dedicated in the Curia Julia after Actium (pl. 75, fig. 27).¹⁷³ The trophy-bearing Victory is placed on an altar with Ammon-head enrichment.¹⁷⁴ A replica of the gem in blue glass was once reported in the collection of the Marquess of Northampton at Castle Ashby.¹⁷⁵ The kneeling Parthians recall the Parthian holding the standard on the Prima Porta cuirass, the figure on denarii struck at Rome in 18 B.C. (pl. 75, fig. 29, no. 3), and several later representations of the motif on coins and on the right central spandrel of the Severan triple arch at Pisidian Antioch.¹⁷⁶

A seemingly unique Campana plaque of usual shape and secondary enrichment, in the Hamburg Museum für Kunst und Gewerbe, shows two kneeling figures in Armenian costume¹⁷⁷ supporting a circular shield with a Gorgoneion in the centre (pl. 75, fig. 28).¹⁷⁸ The composition is a step from the general triumphal allusion of Arimaspe and griffin motifs to the more specific iconography of the defeated barbarians or the Victoriae who support an imperial shield between them in Augustan decorative art. The latter composition enjoys a long history in imperial triumphal and funerary sculpture, culminating in the Decennalian column base of A.D. 303 in the Roman Forum.¹⁷⁹ In the Augustan, Julio-Claudian, and later periods the motif enriched the front panels of the imperial chariots in which the Emperor as triumphator rode through the streets of Rome, and it is perhaps from this source that the design passed to the studios of the Campana plaque designers.¹⁸⁰ On another rare ter-

¹⁷⁰ On this subject as a whole, in addition to the refs. cited for the Prima Porta Augustus (note 123), see J. Gagé, *Mémoires* 1930, 138ff; 1932, 61ff; 1936, 37ff; *RA* 1930.2, 1ff; 1931.2, 11ff.

¹⁷¹ The process of Augustan propagandistic conversion of the Parthian settlement, a diplomatic victory, into a military triumph has been reasoned by Mrs. Holland, *TAPA* 76 (1947) 276ff.

¹⁷² These terracottas include: von Rohden, *Die antiken Terrakotten* IV, Part 2, pls. v (Berlin—Old Arimaspe and griffins), xxii (Dresden—Young Arimaspe giving drinks to griffins), xxix (London—Griffins fighting Arimaspes), and xciii (Museo Kircheriano—Female Arimaspes fighting griffins—closest to the Fogg cuirass; supra, note 99).

¹⁷³ Dio L1.22; Gagé, *Mémoires* 1932, 61ff.

¹⁷⁴ Furtwängler, *op.cit.* 128, no. 2816; idem, *Die antiken Gemmen* II, 178, no. 25, I, pl. 37, no. 25.

¹⁷⁵ *Bdl* 1831, 111, 69; it is not known whether the paste is still at Castle Ashby. Several of the minor antiquities in this collection appear to have strayed or been sold privately in the past; the Etruscan mirrors, however, are now with the vases.

¹⁷⁶ Descriptions, refs., and illustrations in Levi, *op.cit.* 7ff, pls. 1f.

¹⁷⁷ The costume is determined by comparison with that of the kneeling Armenian on denarii struck at Rome in 18 B.C.: (pl. 75, fig. 29, no. 4) Levi, *op.cit.* 9, pl. II, 3; *BMCCRE*, I, 4f, pl. 1, nos. 10ff; 8, pl. 2, no. 3. The figure on the coin reverses wears a tiara since presumably he is a royal Armenian; see further, Toynbee, *Hadrianic School*, 10, 16, for a similar headdress on the female personification of the province.

¹⁷⁸ *Einselaufnahmen* IX, no. 2687 (Pagenstecher) and further refs.

¹⁷⁹ H. P. L'Orange, *RM* 53 (1938) 1ff; *L'Urbe*, 1939, no. 7, 1ff.

¹⁸⁰ The design appears on the front panel of the triumphal chariot on the Triumph of Tiberius cup from the Bosco Reale find (Strong, *Scultura romana* I, Boff, fig. 55), on the empty triumphal quadriga on a rare denarius of Divus Claudius (Bement Coll. [Ars Classica Sale VIII] no. 617), on the chariot which bears Trajan or his effigy on the little frieze of the Beneventum arch (above, notes 163ff, esp. Pietrangeli, *op.cit.* pl. xxxvii), on the chariot in the Triumph of Marcus Aurelius relief in the Conservatori (Stuart Jones, *Conservatori*, 25f, pl. 12), on other coins and medallions (Marcus Aurelius: F. Gnecchi, *I medaglioni romani*, Milan 1912, II, pl. 63, no. 1),

racotta cresting plaque, in the Louvre, twin Victoriae support a large, round shield on which the Augustan Roma is seen seated toward the left.¹⁸¹ The dissemination of the specifically Roman seated Roma theme from the right rear precinct wall of the Ara Pacis¹⁸² to the altar of the Gens Augusta from Carthage¹⁸³ and ultimately to the extensive *aes* coin series of Nero has been frequently and thoroughly documented.¹⁸⁴

Another group of Augustan and Julio-Claudian architectural terracotta plaques feature Victory flying with trophy or wreath and spear.¹⁸⁵ As the Berlin and Castle Ashby gems have indicated, these compositions can be traced into the lesser Augustan arts from the influence of the installation of the Curia Julia Victory, the honours paid to Augustus in 27 B.C., and the Partho-Armenian events of the following decade. A group of Augustan aurei and denarii struck at two uncertain mints (perhaps Caesaraugusta and Colonia Patricia in Spain) in ca. 19-17 B.C. includes this Victory flying in front of the Curia Julia column and holding the civic wreath (*ob civis servatos*) over the golden shield of valour (*clypeus virtutis*) of 27 B.C. (fig. 29, no. 5).¹⁸⁶ Another reverse type in the same series shows the Republican cult image of Mars Victor holding one of the recovered aquilae and one of the standards within the circular, domed shrine which seems to have existed or to have been built on the Capitol for their reception before completion of the Augustan Forum and temple of Mars Ultor in 2 B.C.¹⁸⁷ A third reverse shows Mars Victor holding the two

insignia and standing alone, flanked by the inscription *SIGNIS RECEPTIS* (fig. 29, no. 6).¹⁸⁸ A host of other types from these and parallel mints illustrate the importance of the major civic event of 27 B.C. and the diplomatic-military triumph of 19 B.C. in Augustan numismatic commemoration. (Fig. 29, no. 7, shows the standards of 19 B.C. flanking the shield of 27 B.C.)

The decennium of Augustus' death and the half-century of the honours of 27 B.C. produced a numismatic reinterpretation of this Victory type,¹⁸⁹ which must copy a major painting or relief, since the identical composition, Victory floating to left with inscribed shield, graces one of the faces of the Belvedere altar of 12 to 7 B.C., a monument which has been characterized as marking the full iconographic development of "L'Emblème de la puissance victorieuse d'Auguste."¹⁹⁰ This composition occurs also in identical form as the miniature group on the hand of the seated Roma of the Gens Augusta altar from Carthage, completing the Augustan iconographic circle started with the Campana terracotta plaque in Paris.¹⁹¹ In a manner similar to the Romae of the Ara Pacis and the Gens Augusta altar, the Augustan Victory motif enjoys a later vogue on imperial coins of Nero and his successors, especially on *aes* of Trajan (pl. 74, fig. 20).¹⁹² It also decorates a Flavian relief from the legionary Praetorium at Mainz¹⁹³ and a multitude of Augustan and later terracotta lamps from as far afield as Ephesus.¹⁹⁴

and, in parody of triumphal art, on the front of the boar biga driven by Eros in the Museo Torlonia. Since the design appears on the front of the chariot used by Augustus in the triumphal return of the Parthian standards (BMCCRE I, pl. 8, nos. 17, 20), this chariot or its later copies may be intended throughout, another manifestation of the iconography of the Partho-Armenian settlement in the decorative arts. Nero, it is remembered, "triumphed" on his return from Greece to Rome "*eo curru quo Augustus olim triumphaverat*" (Suetonius, *Nero*, xxv, 1).

¹⁸¹ H. von Rohden, *Die antiken Terrakotten* IV, Part 2, 131, 277, pl. LXXV, no. 1.

¹⁸² G. Moretti, *Ara Pacis Augustae* (Rome 1948) 47, figs. 34f, 157, figs. 126ff, 248ff.

¹⁸³ See note 102.

¹⁸⁴ Vermeule, *Gnomon* 25 (1953) 474.

¹⁸⁵ von Rohden, *Terrakotten* IV, 1, 192f, II, pls. I, III, 1-2, CXXXVIII.

¹⁸⁶ BMCCRE I, cixff, pl. 6, nos. 1, 17, 18, pl. 9, nos. 4, 5; C. H. V. Sutherland, *Coinage in Roman Imperial Policy* (London 1951) 36ff, 188ff.

¹⁸⁷ BMCCRE I, pl. 5, no. 20, pl. 6, no. 9, pl. 7, nos. 18-20; Vermeule, *NumCirc* 63 (1955) 371ff, esp. 373, note 35.

¹⁸⁸ BMCCRE I, pl. 6, no. 12, pl. 9, nos. 9-13, pl. 10, nos. 10-14.

¹⁸⁹ M. Grant, *Roman Anniversary Issues* (Cambridge 1950) 34f, 81, 155.

¹⁹⁰ Gagé, *Mélanges* 1932, 61ff, pl. 1; Taylor, *The Divinity of the Roman Emperor*, 186ff, fig. 36; Amelung, *Var.Cat.* I, p. 242.

¹⁹¹ See notes 181ff and note 102. Mrs. Ryberg's suggestion (*MAAR* 22 [1955] 89f.) that the Gens Augusta altar is Hadrianic rather than Augustan would merely bear out the currency of these Augustan monumental themes revived in the second quarter of the second century A.D.

¹⁹² BMCCRE I, pl. 44, nos. 2-4, 11 (Nero); see also Sutherland, *op.cit.* 169ff; BMCCRE III, pls. 25, nos. 10f, 26, no. 6 (Trajan); etc.

¹⁹³ *Germania Romana*, pl. 48, no. 2.

¹⁹⁴ e.g. H. B. Walters, *Catalogue of the Greek and Roman Lamps in the British Museum* (London 1914) nos. 652, 650, 651, 830, 1062, fig. 214, etc. Another lamp type encountered in several examples is a patent example of Augustan triumphal iconography carried down into the minor arts. Twin flying Victoriae support a shield over a festooned altar flanked by laurel trees (H. Menzel, *Antike Lampen im Römisch-germanischen Zentralmuseum zu Mainz*, Mainz 1954, 31ff, fig. 27, no. 23, p. 340, no. 130).

Like the Fogg Trajan, the cuirassed statue of Trajan discovered nearly two decades ago at Ostia features a breastplate with a motif prominent in the repertory of "Campana" terracotta reliefs, Roman *Victoriae* slaying bulls (pl. 73, fig. 14).¹⁹⁸ The portrait also belongs to the closing years of Trajan's career, and the badly damaged pteryges are enriched with animal protomes in a style which we have noted as characteristic of the transition from the Trajanic and Hadrianic cuirasses to those of the Antonine period (pl. 74, fig. 22).¹⁹⁹ The details of the parallel Campana-plaque composition, however, are more symbolic than the Roman triumphal interpretation of the motif as seen on the Ostia and Nola cuirasses and in a number of Roman architectural friezes, such as that of Domitian's *Aula Regia* on the Palatine²⁰⁰ or the *Basilica Ulpia* fragments in Munich and Rome.²⁰¹

Sir John Beazley has shown how the popular Campana-relief composition developed from a Hellenistic representation of Cassandra before the Palladion into the form of a half-draped Nike before Palladion or candelabrum popular on late Hellenistic and Augustan gems.²⁰² In the Augustan period, other gem cutters—perhaps under the influence of a major painting or relief—transformed the ideal figure kneeling beside the Palladion or altar into the Roman Victory who actively slays

the bull in the manner of Roman representations of Mithras performing a similar feat.²⁰³ This version of the Victory slaying a bull appears on a terracotta of earlier imperial date in the Museo Nazionale Romano.²⁰⁴ The only appearance of this composition on Roman coins and its earliest datable appearance in Roman art is on Augustan aurei and denarii of 20 or 19-18 B.C., struck with the legend *ARMENIA CAPTA* to commemorate the Armenian victories (pl. 75, fig. 29, no. 8).²⁰⁵ It seems most likely that, in placing this composition on the Ostia cuirass, the sculptor was working in traditions of triumphal decoration evolved from Neo-Attic and similar repertoires and given specific purpose in the Augustan era of Partho-Armenian commemoration. He also utilized a motif which, like that on the breastplate of the Fogg Trajan, presented the *Optimus Princeps* as the new pacifier of the Roman East.²⁰⁶ We may conclude by noting that the identical composition, with *Victoriae* slaying bulls before triumphal candelabra, is a prominent feature between the eight upper and lower pylon panels on the arch of Trajan at Beneventum,²⁰⁷ to which no authority has ever denied ample connection with Trajan's Armenian and Parthian wars.²⁰⁸

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¹⁹⁸ G. Calza, "Scavi a Ostia," *Le Arti* 1 (1938-39) 388ff, pl. cxx, fig. 2 (small photo); H. Fuhrmann, *AA* (1940) cols. 435f, fig. 14; *AJA* 59 (1955) 130. Cf. infra IV, no. 1.

¹⁹⁹ See note 125. The right shoulder strap has Eros carrying an object (a trophy or the arms of Ares?) over his shoulder. This uncommon detail also occurs on the cuirassed torso found in the American Academy excavations at Cosa (no. CC549); the complex pteryges of the Cosa cuirass make it a Hadrianic reinterpretation of Julio-Claudian classicism. It seems likely that the statue possessed a (separately worked) head of Trajan or, more likely, Hadrian. Prof. F. Brown states a head of Hadrian in very mutilated state was acquired in connection with the excavations.

²⁰⁰ P. H. von Blanckenhagen, *Flavische Architektur und ihre Dekoration untersucht am Nervaforum* (Berlin 1940) 66, 36. For the Nola statue, in Naples, see note 203.

²⁰¹ F. W. Goethert, *JDAI* 51 (1936) 72ff; Toynbee, *Roman Medallions*, 223.

²⁰² J. D. Beazley, *The Lewes House Collection of Ancient Gems* (Oxford 1920) 78 and bibl., pl. 13, 9.

²⁰³ e.g. on a paste in Berlin (Furtwängler, *Beschreibung*, no. 3572; cf. also no. 3577). A paste in London (H. B. Walters, *British Museum, Catalogue of Engraved Gems and Cameos, Greek, Etruscan and Roman*, 1926, no. 3036, also dated Augustan) shows the composition reversed—Victory rushing left, before a statue of Artemis, a fusion of the Campana-relief and Augustan triumphal motifs.

²⁰⁴ Richter, *PAPS* 95 (1951) fig. 61.

²⁰⁵ *BMCCRE* I, cxxv, 108, no. 671, pl. 16, no. 14.

²⁰⁶ The style of the headless, loricate statue with the Victory-slaying-bull motif on the breastplate, in Naples (Richter, *PAPS* 95 [1951] 190, fig. 54; V. Spinazzola, *Arti decorative in Pompei e nel Museo Nazionale di Napoli*, Milan 1928, pl. 78; E. Ruesch, *Guida*, no. 592), suits the Hadrianic period, a date suggested twenty-five years ago by J. Sieveking, *BWPr* 91 (1931) 24f, fig. 7. The statue has Greek-like unenriched leather pteryges with tassels and a copyist-like fall of drapery wrapped around the left arm.

²⁰⁷ Pietrangeli, *op.cit.* pls. xxxvi, etc.

²⁰⁸ So even Hamberg, *op.cit.* 68ff.

III. Report of the Research Laboratory, Museum of Fine Arts, Boston

WILLIAM J. YOUNG

The examination of the various sections from the Trajan marble figure was made to ascertain the extent of modern restoration. The types of examination to which the figure was subjected were: ultra-violet ray, X-ray diffraction, spectrographic, and petrographic.

ULTRA-VIOLET: The Trajan figure was examined by ultra-violet rays using a "Corex A" filter. The figure in general, except for areas of restorations, fluoresced a fairly light purple interrupted by some lighter streakiness especially down the chest. The front of the right foot under ultra-violet appeared much lighter in fluorescence and gave an indication of being modern. The base fluoresced the same general tone as the rest of the body. The lower part of the cloak on the figure's left arm appeared darker in fluorescence. The skirt covering the upper right leg fluoresced a light amber, indicating that considerable surface restoration exists in this area. Around the upper part of the neck and chin of the figure, a fairly bright yellowish fluorescence appeared, indicating that considerable modern staining had taken place. The surface in the vicinity of the figure's left ear and lower cheek appeared brighter in fluorescence and gave an indication of rechiseling. The back of the head appeared light purple in fluorescence, an indication that this was a later addition. The left and right shoulders appeared similar in fluorescence. The skirt in the vicinity of the rear of the figure's left leg showed the characteristic fluorescence of a modern repatination. The stump to the right of the figure's right leg appeared light purple in fluorescence, an indication that this part was considerably rechiseled. The examination of the Trajan figure under ultra-violet rays indicated that it had received in numerous places much reworking to which had been applied an artificial patination.

SPECTROGRAPHIC: Samples were taken in two groups (Group A and Group B) from areas indicated in pl. 69, figs. 2 and 2a. The samples were ground in an agate mortar, inserted in bored carbon Boron-free electrodes, and spectrograms made. The analysis indicated that the samples contained

mainly the following elements: a high content of calcium with lower percentages of silicon, iron, and magnesium, with traces of copper and aluminum. Some samples contained traces of lead, tin, and zinc. This evidence was thought unreliable as some of the samples submitted included part of the surface which could have been contaminated from modern color patination.

X-RAY DIFFRACTION: Samples were taken from the top of the head (A.3), cloak on left arm, upper part of break (A.5), cloak on left arm, lower part of break (A.6). These samples were ground to a fine powder in an agate mortar, mixed with collodion, and mounted on microscope glass slides. The samples were then inserted in the X-ray beam of a goniometer and diffraction charts made, by the aid of the Geiger-counter X-ray spectrometer, in the hope that some mineralogical difference might be indicated. The patterns obtained were identical to each other, producing a calcite pattern.

PETROGRAPHIC: Samples were taken from the following sections of the figure: below break of neck, front (C.1), rear of base (C.2), back right section at vein (C.3), back lower edge of skirt (C.4), stump of left arm (C.5), back left section of vein (C.6), back section of head (C.7), back of drapery on left arm (C.8), and back section of head (C.9). The samples were mounted on microscope slides and thin sections made. On studying the sections by the aid of micro-comparison projectors, the marble was identified as second grade Carrara. The sections compared with each other, indicating that if restorations were included in the cross-sections, Carrara marble was used for such restorations and the restorations could not be differentiated from the original.

From a technical approach no decisive differences were observed from the various parts of the figure. Examination by the aid of ultra-violet rays gave an indication that the right foot of the figure was of modern origin, along with the section in the back of the head, and that considerable recutting had taken place on the figure which was accompanied by artificial patination and staining of the surface.

SAMPLES FROM GROUP "A" OF TRAJAN FIGURE

	<i>Right arm</i> <i>A.1</i>	<i>Sandal of right foot</i> <i>A.2</i>	<i>Top of head, front</i> <i>A.3</i>	<i>Under skirt, back</i> <i>A.4</i>	<i>Cloak on left arm (upper part of break)</i> <i>A.5</i>	<i>Cloak on left arm (lower part of break)</i> <i>A.6</i>
Iron, Fe	W	T	ND	W	W	W
Silicon, Si	W	T	T	T	W	W
Lead, Pb	ND	ND	ND	ND	ND	W
Manganese, Mn	T	ND	ND	FT	FT	T
Magnesium, Mg	M	W	W	W	M	M
Tin, Sn	FT	ND	ND	ND	FT	T
Calcium, Ca	VS	S	S	S	VS	VS
Zinc, Zn	ND	ND	ND	ND	ND	ND
Aluminum, Al	FT	ND	ND	ND	T	ND
Copper, Cu	T	FT	FT	FT	T	T

Key:

FT (faint trace):	.001%	M (medium):	0.1% — 1%
T (trace):	.001% — .01 %	S (strong):	1 % — 10%
W (weak):	.01 % — 0.1 %	VS (very strong):	above 10%
		ND (not detected)	

SAMPLES FROM GROUP "B" OF TRAJAN FIGURE

	<i>Right foot, bottom</i> <i>B.1</i>	<i>Heel of left foot</i> <i>B.2</i>	<i>Left calf, back</i> <i>B.3</i>	<i>Right knee</i> <i>B.4</i>	<i>Under left arm</i> <i>B.5</i>	<i>Left upper arm</i> <i>B.6</i>	<i>Drapery over shoulder, back,</i> <i>B.7</i>	<i>Back</i> <i>B.8</i>	<i>Top of head, back</i> <i>B.9</i>
Iron, Fe	W	T	W	T	W	W	W	W	W
Silicon, Si	W	W	M	M	M	W	W	W	W
Lead, Pb	ND	ND	T	ND	M	ND	ND	FT	FT
Manganese, Mn	T	FT	FT	FT	T	T	T	T	T
Magnesium, Mg	M	M	M	W	M	M	W	W	W
Tin, Sn	FT	T	T	T	W	T	FT	FT	FT
Calcium, Ca	S	S	S	S	S	S	S	S	S
Zinc, Zn	ND	ND	ND	ND	W	ND	ND	ND	ND
Aluminum, Al	T	FT	T	FT	T	T	W	W	W
Copper, Cu	W	W	W	W	W	W	T	T	T

Key:

FT (faint trace):	.001%	M (medium):	0.1% — 1%
T (trace):	.001% — .01 %	S (strong):	1 % — 10%
W (weak):	.01 % — 0.1 %	VS (very strong):	above 10%
		ND (not detected)	

IV. Nachtrag zu W. H. Gross, *Bildnisse Traians*, Berlin 1940

H. JUCKER

Ein Teil der nachgetragenen Stücke ist bereits von Charles Picard, *REL* 30 (1952) 321 ff, zusammengestellt.

Das Zeichen ~ "ähnlich" verwende ich, um auf das mir am ähnlichsten scheinende unter den bei Gross abgebildeten Beispielen hinzuweisen. Eine Einfügung in die von Gross zu gewaltsam aufgestellte Typenordnung ist vielfach nicht möglich.

Die Abkürzung *Kat.* bezieht sich auf den Katalog von Gross (*op.cit.* 121-134).

A. Sichere antike Traianbildnisse, die nicht bei Gross erwähnt sind

I. Statuen

1. Ostia, Museum: Panzerstatue. Neu zusammengesetzt. Kopf ~ *Kat.* Nr.34 Taf.20 & Nr.48 Taf.23. G.Calza, *Le Arti* 1, 1938-39, 388ff, Taf.120; Fuhrmann, *AA* (1940) 435 Abb.14; R.Calza, *Museo Ostiense* (Rom 1947) Nr.23. Vgl. Taf.73, Fig.14.
2. Cambridge, Mass., The Fogg Art Museum of Harvard University: Panzerstatue, vgl. Taf.1-8.
3. Pozzuoli, Amphitheater, Skulpturenmagazin: Togastatue. Gross kannte keine erhaltene Togastatue Traians, vgl. aber S.14, Anm.57. Kopf ~ *Kat.* Nr.46 Taf.26. Reisenotiz 1948. A.Maiuri, *Memorie dell'Accademia di Archeologia, Lettere e Belle Arti di Napoli* 3 (1955) 79f, Taf.18f.
4. Sabratha, 1940 ausgegraben: Togastatue. Die Zugehörigkeit des Kopfes zur Statue ist sehr wahrscheinlich. Kopf ~ *Kat.* Nr.23 Taf.14a-b. *AA* (1942) 382f; G.Caputo, *Quaderni di archeologia della Libia* 1 (1950) 10 Nr.1 & 7; S.17f, Taf.6a-7.

II. Köpfe

5. Iraklion, Museum Nr.317, aus Lyttos. Etwas über natürliche Grösse. Am Halsansatz abgebrochen, wohl von einer Statue. Nasenspitze fehlt. Weisses Marmor, teilweise versintert. Leicht zu seiner Rechten geneigt. Eichenkranz (Platon: Lorbeer- kranz, Hanfmann brieflich: Ahorn?) zur Rechten beschädigt, vorne weggebrochen.

Gut durchgearbeitete Modellierung, ~ zwischen *Kat.* Nr.37 Taf.18b und *Kat.* Nr.62 Taf.29 c-d; Frisur ~ *Kat.* Nr.9 Taf.8b. Reisenotiz März 1953. Für Photo und Auskünfte danke ich Direktor N.Platon. N. Platon, *A Guide to the Archaeological Museum of Heraclion* (1955) 150. Vgl. Taf.75, fig.30.

6. Rom, Museo Capitolino Nr.2967, ausgegraben 1937 in der Area Sacra bei S.Omobono in Rom. Trägt Tiara (phrygische Mütze) mit hochgeklappten Wangenlaschen als Kopfbedeckung, über dem Tiara- rand Lorbeerkranz mit Medaillon ohne erkennbare Darstellung. Spitze der Tiara und Hals gebrochen. Rückseite nicht ausgearbeitet. Natürliche Grösse. ~ *Kat.* Nr. 4 Taf.6a-7 & Nr.7 Taf.8a. C.Pietrangeli, *Fasti A IV* Nr.224; *Cataloghi dei musei comunali di Roma I, Musei capitolini. I monumenti dei culti orientali* (Rom 1951) 10 Nr.4: als Traian-Attis gedeutet, wogegen Picard, *REL* 30 (1952) 321, berechnete Bedenken äussert (vgl. K.A.Esdaile, *JRS* 7 [1917] 71ff, Taf.1, gegen die Erklärung der Bronzestatue im Victoria und Albert-Museum als Commodus-Mithras, wobei zudem übersehen ist, dass dort Sockel und Büste nicht zusammengehören). Die Identität mit Traian ist unzweifelhaft.
7. Tarragona, Tabakfabrik: Fragment. ~ *Kat.* Nr.5 Taf.5 & Nr.11 Taf.9. M.Wegner, *ArchEspArq* 1953, Abb.1.
8. Rom, Kunsthandel, Via del Babuino Nr. 157, aus Privatbesitz. Sehr verwaschen und geputzt, teilweise mit brauner Kruste bedeckt. Nase in Gips ergänzt. Kopf leicht zur Rechten geneigt und gewendet. Etwas überlebensgröss. ~ *Kat.* Nr.9 Taf.8b. Reisenotiz April 1956. Unveröffentlicht.
9. Genf, Musée d'Art et d'Histoire 19.049; früher in Prangin bei Nyon, Parc de la Villa Napoléon. Kopf auf nicht zugehöriger Büste. ~ *Kat.* Nr.12 Taf.10a. W.Deon-

- na, *Les Musées de Genève* 7 (1950) janvier; *Genava* 29 (1951) Taf.2.
10. Kos, Museum. Gesicht stark zerschlagen. An Haarsaum und Augenpartie als Traian erkennbar. Erster Typus. Reisenotiz März 1953. Unveröffentlicht.
 11. Paris, Louvre, *Magazin Ma* 3512. Kontamination zweier Typen? Gesicht ~ *Kat.* Nr.29 Taf.17; Frisur ~ *Kat.* Nr.56 Taf.28 c-d. F.Braemer, *La Revue des Arts* 2 (1952) 46ff, Abb.
 12. Ascoli, Museum. Wahrscheinlich von einer Statue abgebrochen. ~ *Kat.* Nr.70 Taf.22 a-b. *BullComm* 68 (1940) Notiziario, 96, Abb.4; *Le Arti* 3 (1940/41) 136 Abb.6 als Domitian bezeichnet, zuerst als Traian erkannt von Picard, *REL* 29 (1951) 352 mit Anm.2; *REL* 30 (1952) 320.
 13. Cagliari, Museum. Aus Olbia. Wahrscheinlich von einer Statue. Provinzielle Arbeit. Dezennalientypus. Taramelli, *NS* (1919) 113ff, Abb.1f; D.Panedda, *Olbia nel periodo punico e romano. Forma Italiae, Sardinia* (1952) 48 mit Anm.4 Taf.6 Abb.1.
 14. London, British Museum (Leihgabe) früher im Bischofspalast von Chichester. Kolossal, erinnert an Köpfe der Flavii aus Ostia (Ostia, Antiquarium und Kopenhagen, unveröffentlicht). Sehr bestossen und verwaschen. Benennung in der Museumsanschrift. Unveröffentlicht.
 15. Rom, Palazzo dei Conservatori, Garten, zur Zeit für Neuaufstellung entfernt. Kolossal. Zum Einsetzen in Statue? Die Oberfläche ist an keiner Stelle fertig bearbeitet. H.P. von Blanckenhagen, *Jdl* 59/60 (1944-45) 45ff, datiert ins 5.Jahrh.n.Chr. eher richtig als S.Stucchi, *Il ritratto bronzeo di Costantino del Museo di Cividale* (Studi Goriziani 13) 24 Abb. 20: konstantinisch (Stucchi gründet seine allzu zahlreichen Spätdatierungen fast ausschliesslich auf die Haartracht). Eine sichere stilistische Beurteilung lässt der unfertige Zustand kaum zu.
- ### III. Geschnittene Steine
16. Genf, Musée d'Art et d'Histoire. Gemme. H.Vollenweider, *Atlantis* 15 (1955) Heft 11, November, 505-507.
 17. *Kat.* A3, S121, Taf.48l. Modern. Gravische klassizistische Harte, unantik psychologischer Ausdruck, sentimentale Kopfeigung, disproportionierter Hinterkopf, falscher Ansatz der Nackenhaare, Frisur der Plotina sonst nicht belegt. Ausführlicher an anderem Orte H. Vollenweider, die mich auf das Stück aufmerksam machte.
- ### B. Berichtigungen zu Traianbildnissen, die bei Gross behandelt sind
18. *Kat.* Nr.22: befindet sich (Sommer 1956) in der Sammlung Bergsten in Stockholm und wird voraussichtlich an die medizinische Akademie übergehen. Zustand wie bei Michaelis angegeben. ~ *Kat.* Nr.12 Taf. 10a. Abgebildet in *Collection de peinture et sculpture appartenant à M. le Consul Général et Madame Karl Bergsten*, Catalogue descriptif rédigé par M.Karl Asplund (Stockholm 1943) Nr.31.
 19. Gross S.40. G.Rodenwaldt, *AA* (1940) 612 Abb.1, glaubt die Darstellung Traians in den Reliefs des Tropaions von Adamklissi zu erkennen.
 20. Gross S.53. In der kopflosen Sitzfigur des Kaisers auf den hadrianischen "Anaglypha Traiani" sucht M.Hammond, *MAAR* 21 (1953) 127ff, die Wiedergabe einer Traiansstatue nachzuweisen.
 21. *Kat.* Nr.28, Taf.21b, hat auszuscheiden. Bildnis eines unbekannten Jünglings traianischer bis hadrianischer Zeit; nicht Antinous, an den Ricci, *NS* (1939) 53 Nr.1 Abb.1, erinnerte.
 22. *Kat.* Nr.55 Taf.25b, von Gross mit ? als Traian bezeichnet, ist sicher kein Traiansbildnis, sondern ein nicht identifizierbares spätantikes Porträt wohl des 5.Jahrh.n.Chr. Die nähere Begründung soll anderswo erfolgen.
 23. *Kat.* Nr.60 Taf.29 a-b. Das fein durchmodellerte Köpfchen ist keinesfalls spätantik, wie P.H. von Blanckenhagen, *Jdl* 59/60 (1944/45) 46 Anm.1, vermutete. Die Frisur wirkt etwas massig, weil ihre Oberfläche unpoliert ist.
 24. *Kat.* Nr.69A (neue Inventar-Nr.3857) ist eine gute und zweifellos antike, traianische Arbeit trotz M.Wegner, *Die Herrscherbild-*

- nisse in antoninischer Zeit (Berlin 1937) 13 und 277, der kleinformatige Kaiserbildnisse in Stein rundweg für modern halten möchte, vgl. dazu F. Poulsen, *Gnomon* 16 (1940) 207 und M. Wegner, Hadrian (Berlin 1956) 110 zu Vatikan, Magazin 3625.
25. Gross S.133 xi. Die Büste ist erhalten. Stark ergänzter Kopf (vgl. oben).
26. Gross S.134 C ee. Aufstellungsort jetzt wieder Museo Chiaramonti, Nische XLV Inv. 3.1931. Kann doch nur Traian darstellen, auch Ostia als Herkunftsort ist der herkömmlichen Benennung günstig. Abweichungen vom Gewohnten rühren teilweise von den Ergänzungen und der tiefgreifenden Uebersarbeitung her.
27. *Kat.* Nr.61 Taf.27a: Jetzt auf Veranlassung von H.P.L.'Orange als Fälschung magaziniert. Der Kopf ist mit Sicherheit nicht modern (Reste sog. patina ramificata), aber stark überarbeitet.
- C. Zweifelhafte, fälschlich so benannte und moderne Traianbildnisse, die noch nicht bei Gross erwähnt sind
28. Rom, Comitium, hinter der Curia. Kopflose Porphyrsstatue, überlebensgross, von G. Bartoli, *NS* (1947) 85ff ohne hinreichende Gründe als Traian gedeutet, von G. Calza, *Atti della Pontificia Accademia di Archeologia*, Ser. III, *Rendiconti* 22 (1946-47) 185ff als Hadrian. P. Mingazzini, *AA* (1950/51) 197 vermutet Wiederverwendung als Bildnis des Aëtius.
29. Perge. Hadrianische Panzertorsi und Weihinschriften, von denen eine für Traian. *FastiA* 9 (1954) 118 Ende.
30. Valencia, gefunden 1929. *FastiA* 3 (1948) 2190; Picard, *REL* 30 (1952) 323, Anm.6. Ich kenne weder Original noch Abbildungen.
31. Gigen, Ausgrabungsmuseum. Tondo mit Büste Traians nach *FastiA* 9 (1954) 3326.
32. Kvarnby bei Malmö, Sammlung des Porträtisten Henning Malmström. Büstenfragment. A. Andén, *Opuscula Romana* II, S.22, Nr.10 Taf.16 (Separatabdruck). Gegen die Identifizierung mit Traian sprechen die Hagerkeit, besonders das stark hervortretende Jochbein, und die Proportionen in der Vorderansicht. Die Haarordnung hat bei Traianköpfen keine genaue Entsprechung. Die vorzügliche Arbeit stellt wohl einen unbekannten älteren Mann traianischer Zeit dar. (Nr.6 Taf.8-11 bei Andén ist sicher nicht Caesar).
33. Verschollen. Kopf. *Sotheby & Co. Catalogue of Egyptian, Greek and Roman Antiquities* (E.P. Warren Coll.), May 27th 1929, S.20 Nr.106 Taf.III. ~ *Kat.* Taf.16 a und b, S.91f. Augen gewaltsam ausgeschlagen. Echtheit nach der Abbildung allein nicht zu verbürgen.
34. Liverpool, Museum 53.115.4 (aus Philip Nelson Coll.) Kopf. H. 24 cm., auf nicht zugehöriger, anscheinend moderner Büste. Nase und teilweise die Ohren ergänzt. Völlig überarbeitet oder modern. Beurteilung nach Photo und Angaben von C. Vermeule.
35. Schloss Fasanerie (Adolphseck) bei Fulda. Büste. Aus Palazzo Strozzi in Florenz. Von L. Curtius nach mündlicher Mitteilung für antik gehalten, vom Besitzer wohl mit Recht als Renaissancearbeit betrachtet, obwohl äusserst stilgemäss. "Dezennalien-typus." Für traianische Zeit unmögliche kleine Büstenform, die keinerlei Spuren von späterer Abarbeitung erkennen lässt.
36. Paris, Cabinet des médailles. Basaltköpfchen. Die Ähnlichkeit reicht für die Identifizierung, die J. Babelon vorschlägt, nicht aus. Nach den Abbildungen scheint konstantinische Entstehung möglich. J. Babelon, *Bulletin de la société des antiquaires de France* (1943-44) 41ff Taf.1; Bedenken äussert auch Picard, *REL* 30 (1952) 321 (mit Massangaben in cm. statt mm.).
37. Fiesole, Museum Nr.341. Fragment eines überlebensgrossen Kopfes, das De Agostino an Traian erinnert; bereits von M. Stuart richtig als Claudiusporträt erkannt. A. de Agostino, *Fiesole* (Rom 1949) 47; Meriwether Stuart, *The Portraiture of Claudius* (New York 1938) 72 Nr.13.
38. Nijmegen, Rijksmuseum G. M. Kam. Bronzestatue. Van Buchem, A Bronze "Head of Trajan" at Nijmegen, *BABesch* 31 (1956) 26ff. Sicher nicht Traian. Nach

- Stil und Büstenform einheimisch-gallo-römische Arbeit überdurchschnittlicher Qualität, um Mitte 1. Jahrh.n.Chr. Der Dargestellte nicht identifizierbar. Die "Franzenfrisur" ist in der Provinz nicht auf traianische Zeit beschränkt, umgekehrt wird Traian sie von dorthier nach Rom eingeführt und zur Mode erhoben haben.
39. Luzern, Historisches Museum. Bronzestatue des Mercur aus Ottenhusen. H. 30.5 cm. Als Bildnis Traians angesprochen von F. Staehelin, *Die Schweiz in römischer Zeit*² (Basel 1931) 472 mit Anm. 4, Abb. 124f; 3. Aufl. (Basel 1948) 506 mit Anm. 1, Abb. 136f, zugernd anerkannt von Ch. Simonett, *AA* (1939) 525f; W. Deonna, *L'art romain en Suisse* (Genf 1942) 33: "Mercur-Trajan." Die von Staehelin als Hauptargument angeführte Frisur hat in Gallien wenig Gewicht, vgl. Nr.38, auch die langen Backenbärtchen sind einheimische Mode, vgl. Deonna, *op.cit.* 46. Die Entscheidung muss einer neuen Untersuchung vorbehalten bleiben.
40. Dumbarton Oaks Collection, Acc. no. 40. 39. Köpfchen. G.M.A. Richter, *Catalogue of Greek and Roman Antiquities in the Dumbarton Oaks Collection* (1956) Nr.9. Die von der Verf. erwähnte Identifizierung mit Traian durch Ross ist sicher unhaltbar, auch wenn es spätantik ist, vgl. Hoffmann, *AJA* 61 (1957) 206.
41. Florenz, Museo Archeologico, Nr.226. Kameo. Erhalten sind Kopf, nahezu en face, mit Lorbeerkranz und ein Teil des Oberkörpers. Als Anhänger in Gold gefasst. Museumsanschrift: Traiano (?). Die Identifizierung scheint mir möglich. Eine Veröffentlichung ist mir nicht bekannt.
42. Paris, Louvre. Amethyst, von L.Curtius als antikes Traianbildnis veröffentlicht, ist zweifellos mit Coche de la Ferté für modern zu halten. L.Curtius, *Museum Helveticum* 8 (1951) 216ff Abb. 1f; E.Coche de la Ferté, *Museum Helveticum* 9 (1952) 246f.
43. Hannover, Kestner Museum 759. Gemme. Bekränzt, ausserdem sieben Strahlen über dem Scheitel. Feine Arbeit. 18. Jahrh.?

BERN

44. Cuirass statue found at Orange in 1952. *FastsA* 8 (1953) 233, fig.69. Perhaps Trajan; so also the torso from Centuripe (supra, note 108a) (C.C.V.).
45. From the excavations in the vicinity of Mulino Barbagallo, Centuripe. The upper part of a head of Trajan, including the r. ear and r. eye. Type of the Munich head from Ostia. ~ *Cat.* No.29, pl.17, also No.69, pl.31b. G. Libertini, *Centuripe* 43, pl. xv,2 (C.C.V.).
46. Agora, Athens, Inv. S.347. "Colossal" marble head. M. Bieber, *AJA* 60 (1956) 206, suggests Trajan. The difficulties of a cogent identification are discussed by E. Harrison, *Agora I* (1953) no.17, pl.12. Certainly a Julio-Claudian emperor and certainly not Trajan (G.M.A.H.).

The Central Court as the Minoan Bull-Ring*

J. WALTER GRAHAM

PLATES 76-79

In spite of the fact that the bull-games are one of the most distinctive and most discussed features of Minoan civilization there is still no settled opinion where the performances actually took place.¹

Pendlebury, it is true, did suggest that if the arena was not a large ring but "a narrow passage," the Central Court of the Palace of Knossos "could have been used with specially erected palisades." But he felt that "on the meadows below (the east wing of the palace) was no doubt the bull-ring, for they are the only place in the district suitable for an arena of any size."² Evans also favored a special enclosure. In 1921 he declared that these "performances . . . clearly took place in some 'arena' prepared for the purpose. The course of the bull . . . can only be conceived in an area of round or oval shape enclosed by barriers. What we witness, in fact, are the feats of the Circus, performed in honour of the great Minoan Goddess, and doubtless overlooked by her pillar shrine, such as we see it in the Knossian Miniature Fresco. That on either side of this were grand stands crowded with spectators, appears, moreover, not only from the fresco panel but from the introduction of the characteristic pillars of these stands between representations of scenes of the tauro-kathapsia on steatite rhytons." "The actual enclosure," he continues, "... may well have been . . . a wooden palisade. In that case it is hardly probable that the actual remains of such will come to light."³

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¹ Herget, in a recent series of colored restorations of ancient Greek life done under the supervision of Prof. Richard Stillwell, has represented a Minoan bull-game taking place in the Central Court at Knossos; Stillwell's comment is, "The games were held in front of a specially built grandstand. Sometimes they may have taken place in the great court of the Palace, as is shown here." The temporary palisades in Herget's picture evidently follow Pendlebury's suggestion. *NatGeog* 85 (1944) 290; National Geographic Society, *Everyday Life in Ancient Times*, 202f.

² Pendlebury, *Archaeology of Crete*, 187. Life (Jan. 21, 1957, p. 61) has recently pictured the bull-games in this way; this "restoration" should go far toward convincing anyone that this is *not* the background represented in the "Grandstand Fresco" etc.

³ *JHS* 41 (1921) 255f.

Nor indeed have any such remains been discovered in the thirty-five years since he made this observation. Yet, had there been a special construction of the nature suggested by the "grand stands" and "characteristic pillars" it is likely that some traces of these, if not of the "wooden palisade" would have turned up in the neighborhood of at least one of the Cretan palaces.

The simple explanation for this failure to find any remains of a special arena is, I believe, that the games took place in the Central Court of the various palaces. The evidence for this is strong, if not absolutely conclusive, and will now be presented, commencing with certain general considerations.

The great Central Courts with their porticoes at Knossos, Phaistos, and Mallia, are the most striking feature of the ground-plan of these palaces. The remarkable similarity in size and proportions of all three is apparent in pl. 76, fig. 1, where they are drawn to the same scale. Knossos measures about 52 m. long by a little over 24 m. wide at the north end of the court;⁴ Phaistos, about 51 m. by 23 m.; and Mallia, about 48 m. by 22 m.⁵ The proportion of width to length in all three is close to 1:2¼. In all three the long axis is oriented north to south.⁶ This coincidence in size and shape might tempt one to suggest that the Central Courts were constructed to definite specifications—like a football field or a tennis court—for some definite purpose.⁷

⁴ The dimensions are scaled from the large plan, A, in Evans, *Palace of Minos II*; south of this, where the court appears to broaden out toward the east, a portico may have reduced its width. Dinsmoor (*Architecture of Ancient Greece*,³ 9, 14) gives the dimensions of the Knossos court as 200' by 86', and of the Phaistos court as 153' by 73'; but instead of there being almost 50' difference in the lengths of these courts there is actually only about 2' (Knossos 170', Phaistos 168')!

⁵ Including its north portico (a feature not possessed by the other two palaces) its length would be about 51 m.

⁶ A. W. Lawrence (*BSA* 46 [1951] 81) comments, "the motive, no doubt, was to obtain as much sunlight as possible in winter for the sake of warmth"; presumably this is true, but an east-west axis would have been cooler in summer.

⁷ This idea is not as unlikely as might be supposed, in view of the remarkable coincidence in measurements of the projecting west façade units of the palaces; the intended size might be 170' by 75' on the Cretan foot standard. See my forthcoming

Another point of similarity is the existence of long porticoes on the ground floor, and no doubt galleries above in the second story. Both Phaistos and Mallia have a portico fronted by alternating pillars and columns along the entire east side of the Central Court, while Phaistos and Knossos seem to have had porticoes along the west side.⁸ Mallia also had a columned portico across the north end of the Central Court.

What were the main functions of the Central Courts? No doubt they served as a means of intercommunication between the various quarters of the palace fronting on them, and as a source of light and air for the surrounding rooms. But they seem unnecessarily large for this. It is true also that the need for a large open area for festivals, processions, military reviews, or the like, might account for the palace court; yet Knossos, Phaistos, and Mallia were all provided with a large paved exterior court along the principal, i.e. west, façade, which could have been used for such purposes.

Now there exists a remarkable resemblance—to be explained, doubtless, on functional, not historical, grounds—between the Minoan Central Court and the Forum of Pompeii of the period of the Roman Republic and Early Empire. The latter was also long and narrow, with its main axis north to south, and provided with porticoes and galleries along its east and west sides; many of the city's religious, administrative, and commercial activities were housed in the buildings which surrounded and faced on the area, and it of course served likewise as a means of communication between these buildings and as a place of general resort for the inhabitants. It thus resembles quite closely the ideal Italian forum ("out-of-doors place") described by Vitruvius, which he recommends should be laid out in oblong rather than square form (in the proportion of 2:3) so that it might also serve as a place for the display of gladiatorial performances.⁹ In-

deed the earliest building designed specifically for gladiatorial exhibitions, known from either literary or archaeological sources, the amphitheater at Pompeii, was not constructed until about 80 B.C.¹⁰ Buildings designed particularly for Greek drama or for political or legal assemblies were also slow in developing. The general precedes the specific.

The analogy of the Italian forum suggests, then, that one of the many functions of the Cretan court may have been to provide a place for the exhibition of sports or games, and Evans himself has supposed that such sports as boxing and wrestling were put on there.¹¹ This is entirely reasonable, but the arguments could apply with equal force to its use for the bull-games, and we must consider further evidence pointing in this direction.

Many representations of the Minoan bull-games are associated with an architectural background; instances have already been referred to in the passage quoted from Evans at the beginning of this article. The most numerous class of such representations, the engraved gems, has little to tell us because the limited field allows scant room to show anything but the bull and the human performer. Some gems, however, Evans points out, suggest an architectural setting by a series of parallel lines at the base of the scene.¹² Carved ivory fragments also associate bull performances with architectural façades.¹³

A steatite rhyton from Hagia Triada known as the Boxer Vase represents, in low relief on the second register from the top, the figure of a man leaping over the horns of a bull.¹⁴ Though unfortunately fragmentary we may suppose that like the accompanying scenes of boxing it was punctuated with columns or pillars possessing a peculiar and very distinctive rectangular capital decorated with incised circles; at any rate the association of bulls and this type of capital is assured by a small fragment of another steatite vase from Knossos.¹⁵ The

articles on "Windows, Recesses, and the Piano Nobile" and "The Minoan Foot-unit."

⁸ A columned portico has recently been discovered along the west side of the Central Court at Phaistos belonging to the second-last stage of the palace (the "Primo Palazzo"), *ILN* 229 (Sept. 29, 1956) 506-508, fig. 13, *BdA* 41 (1956) 264, fig. 47.

⁹ *Vitr. De arch.* 5.1.1-3. The Minoan court is more elongated than the Vitruvian forum, being about 2:4½, while the Pompeian forum is about 2:7½. Vitruvius also remarks that the intercolumniations of the surrounding porticoes should be quite wide (for better visibility), and that there should be balconies on the upper floor. Another interesting point of resemblance in architectural treatment between the Italic forum at Pompeii

and the Minoan court at Phaistos is the dominant and axially-placed temple at the north end of the former, and the dominant, symmetrical scheme at the north end of the latter (pl. 79, fig. 14).

¹⁰ The oval arena of the amphitheater perpetuated these long, narrow proportions—being usually narrower than 2:3.

¹¹ *Palace of Minos* III, 61f, 207.

¹² *ibid.* I, 686f. Regarding the gem from Priene see below.

¹³ *ibid.* III, fig. 141.

¹⁴ *Jdl* 30 (1915) 248, fig. 3; Bossert, *Alikreta*, fig. 271, p. 31 and bibliography cited there.

¹⁵ *Palace of Minos* I, 688, fig. 507. I would suggest that the reason for the association of this peculiar type of capital with

presence of these same capitals on the fragments of the "Grandstand Fresco" restored by Evans, could be taken as indicating (as indeed Evans argues) that the crowd of Minoans and court ladies in this mural are really watching the Cretan tournaments (pl. 76, fig. 2).¹⁶

This view receives some support from the discovery—at Mycenae, to be sure, but no doubt following Cretan motives—of "fresco fragments" which, Wace says, "include several pieces of a scene showing women looking over the balustrade of a loggia in a Mycenaean palace at a scene of sports, bull baiting and acrobatic displays, in an arena below."¹⁷ At Knossos, too, fragments of a Middle Minoan III mural found in the Magazines depict a crowd watching something in an architectural setting of columns, etc.; and found with these, though at a larger scale, a fragment representing a bull's head and the locks of an acrobat above it.¹⁸

All this surely indicates something more than a mere palisaded enclosure with a crowd watching from the slope of an adjacent hill. And, since we cannot credit, at this early date, the existence of a specialized structure with rows of seats and with roofs supported by superimposed series of columns, it would be natural, unless there were strong objections, to interpret the so-called "Grandstand Fresco" as representing in a conventionalized way the porticoes and galleries facing on the Central Court of the Palace of Minos. Surely the sea of heads—not really in orderly rows in the *unrestored* parts of the mural—can be understood as intended to suggest crowds watching from balconies ranged one above another, and not, as one is tempted to

do on the analogy of the Minoan "theatral areas," as people seated (or standing) on rising tiers of seats.¹⁹ The tripartite "pillar-shrine" on the mural fragment also finds a counterpart on the west side of the Central Court at Knossos, if Evans' restoration (helped out by this very fragment) may be taken as approximately correct.²⁰ Shrines have also been found on the west side of the courts at Phaistos and Mallia.²¹

One of the most interesting and yet enigmatic representations of bull-grappling is that on a Minoan gem, in fine style, said to have been found at Priene (pl. 78, fig. 3). It shows a man leaping from above on the head of a bull which is usually described as drinking out of a tank.²² But why would a trough or tank be built so high that a bull must rear up and put its forelegs on the edge to drink out of it, and could or would the animal do so?

Now the face of the so-called trough is decorated with a pattern of linked diamonds which traces the four sides and the diagonals of the oblong, and A. B. Cook, who disagreed with the interpretation as a trough, thought that the pattern merely "depicts the Labyrinth as the scene of the action," much as did the meander pattern occurring in scenes of Theseus and the Minotaur on black-figure and red-figure Athenian vases.²³

Evans also found remains of a mural painting at Knossos with the same scheme of oblong with crossed diagonals, but with a continuous spiral pattern instead of the linked diamonds. Among the reliefs with the spiral pattern were "remains of painted stucco low reliefs . . . the most numerous were fragments of figures of bulls . . . also . . . part of a human leg or arm. . . . It is clear that we have

scenes representing (ex hypothesi) the Central Court is that such capitals crowned the heavy piers occurring, for example, along the east porticoes at Mallia and Phaistos.

¹⁶ *ibid.* III, 61f, 207.

¹⁷ Wace, *Mycenae* (1949), 64f; *Palace of Minos* I, 445.

¹⁸ *ibid.* figs. 319, 321, 384f, and p. 527.

¹⁹ The "steps" of the theatral areas are too low for proper seats; W. A. McDonald (*Political Meeting Places of the Greeks*, Baltimore 1943, 17) suggests that the Cretans sat sideways on them.

²⁰ *Palace of Minos* II, 803-807. Platon, who is making a very thorough investigation of Minoan shrines, accepts Evans' restoration of a tripartite shrine in this position, *Kretika Chronika* 8 (1954) 434f.

²¹ Platon believes that both Nilsson and Miss Banti take too skeptical a view of Evans' identification of cult rooms, the latter going so far as to declare that no shrines can be definitely recognized in the last palace at Phaistos; in his article studying the pillar shrines (see preceding note) he accepts room 23, near

the southwest corner of the Central Court (*ibid.* 453, KH). Several shrines have been recognized at Mallia, including room VI 1 (Chapouthier et Charbonneaux, *Fouilles exécutées à Mallia, premier rapport* 1928, 19f). Whether the bull-games were religious or secular matters little to our argument. Nilsson asserts that "there is nothing in the Minoan monuments to prove that it was more than a very popular secular sport" (*Minoan-Mycenaean Religion* [1950] 374); no doubt such a sport, like our celebration of Christmas, would tend to become highly secularized, but Nilsson is too prone to minimize the religious element in Cretan culture.

²² *Palace of Minos* I, 377, fig. 274; III, 186, fig. 129; IV, pl. LRV; Bossert, *Althetia*, 42 (401 i) and bibliography cited there. So also Norman Gardiner, *Athletics of the Ancient World*, 11; Furtwängler, *Antike Gemmen* II, 26, No. 9; Matz, *Frühkretische Siegel*, kat. 146.

²³ Cook, *Zeus* I, 499. Cook notes that "Reichel himself apparently shares Furtwängler's view that the bull is drinking out of a trough!"

to do with a Minoan bull-grappling or bull-catching scene of the usual kind . . . plain red-faced stucco . . . (formed) the background of these reliefs, as it did of one side of the framework of the Spiral Fresco."²⁴

Sir Arthur then proceeded to note that a pattern identical with that on the Priene gem was prominently used in two niches symmetrically situated on either side of the central door on the north façade of the Central Court at Phaistos, and in a third niche in the wall of the corridor just within this door. And nowhere else in Cretan or Mycenaean art!

This "remarkable fact," declared Evans, brings out "the palatial connexions of this scene." Indeed the facts here presented point so inevitably to these general conclusions that they led me quite independently to the same views. Nevertheless Evans rather lamely concluded that it was "not necessary to suppose that this *tour de force* was actually performed in a Palace Court, though the Phaestian parallel might supply some warrant for such a supposition."²⁵

"Not necessary," perhaps; but, combined with the preceding evidence, it could certainly be accepted as a highly probable hypothesis unless strong arguments to the contrary existed. The great objection, both Evans and Pendlebury evidently felt, was the apparent impossibility of supposing that this rough-and-tumble sport could have taken place in the Central Court without any way to confine the bulls and to prevent them from charging into the mass of spectators or into the rooms behind.²⁶ And when one searches for some trace of a system of barriers in the Central Court of the Palace of Minos—where one always looks first and, too often, last, as well—there seems to be none. This is, however, not surprising in view of its poor preservation along all four sides.

In much better condition is the Central Court of the palace at Mallia. Along nearly the whole east side of the court (pl. 77, fig. 4), a distance of some 34 m., runs a portico about 3 m. deep fronted by a row of alternating pillars and columns in the

familiar Minoan scheme.²⁷ At regular intervals between each pillar and column occur three holes clearly intended as sockets for vertical posts, showing that there was some kind of a barrier between columns and pillars. Each socket measures about 8 cm. in diameter and about the same in depth, suggesting that the post set in it could have withstood a considerable blow. Free access to the portico was thus restricted to spaces at its north and south ends, and even here it could be controlled by doors.

The preliminary French publication does not explain the purpose of this barrier nor comment on its strangeness. Yet it is obviously no ordinary railing to prevent anyone inside the portico from falling out, since its floor-level is practically the same as that of the court. It was not designed merely to channel entry to the two ends of the portico for the arrangement of rooms behind can afford no justification for this, nor would this explain the existence of doors at the ends. Indeed, since it must have been perfectly possible for a person to clamber over the barrier, or for a child or even a not too generously-sized adult, to squeeze between its railings, it surely must have been designed to exclude animals, and animals of considerable bulk at that. It seems difficult therefore to advance any more likely explanation than that the portico was used by spectators of the bull performance.

Some support for this view is provided by a mural fragment from Knossos (pl. 78, fig. 5) which depicts a female figure standing behind a barrier composed of vertical posts and horizontal rails, while on the same fragment appears a male head on a red background, clearly one of a crowd of spectators similar to those in the "Grandstand Fresco" who, we have seen reason to believe, were watching the bull-games.²⁸

But were the other sides of the Mallia court also protected? On the north side the answer is clearly "yes," for the situation closely resembles that on the east side. Across this entire end extends a colonnade whose intercolumniations must have been blocked in some fashion²⁹ since there is a distinct

tators on the rows of seats at the north end of the Theatral Area have been protected from a charging bull? Cf. Dinsmoor, *op.cit.* 12; McDonald, *op.cit.* 7-19.

²⁷ Chapouthier et Joly, *Mallia, deuxième rapport* (1936) 6, pls. 2, 35.

²⁸ *Palace of Minos* III, 59, fig. 35.

²⁹ Perhaps by a low protective wall of mud-brick as a shield against the wind (as in classical Greek houses etc.; cf. *Hesperia*

²⁴ *Palace of Minos* I, 375f.

²⁵ The first quotation in this paragraph is from the *JHS* 41 (1921) 256; the second, from a similar passage in the *Palace of Minos* I, 377.

²⁶ Pernier's suggestion that the west court at Phaistos could have been used for the bull-games (Pernier e Banti, *Guida degli Scavi Italiani in Creta* [1947] 50; *Dioniso* 3 [1933] 289ff) is not a happy one; how, for example, could the spec-

entrance with traces of a door between the column and the wall at the west end of the portico at a point opposite the passage leading north to the North Court.²⁰

On the south side of the Central Court at Mallia the foundation consists of a series of alternating projecting and receding sections with a narrow passage behind. The dressing of the stone blocks which form this foundation supports the French restoration of a horizontal timber along the front, secured by tenons socketed in the mortises seen at intervals near the front edge, with heavy wooden posts set on this to frame wide openings.²¹ But such openings are certainly unnecessarily numerous and broad merely to light the narrow corridor within, and they do not seem intended to light rooms behind this. Surely we can best explain them as forming embrasures from which spectators might watch in safety performances in the Central Court. In pl. 78, fig. 6 we have restored a protective barrier within the embrasures, on the basis of the Knossos mural fragment (fig. 5); the vertical posts, being socketed in the horizontal wood beams, would of course have left no trace.

For nearly twenty meters along the central part of the long west side of the Mallia Central Court runs a remarkably narrow line of foundation, much narrower than the walls which form the regular partitions throughout the palace (fig. 1). It would seem to have been merely for a low screen-wall or parapet to protect the spectators. A room (VI 1) opening wide on the court near its northwest corner, and reached from it by several broad steps, contains an altar; was the bull, as some believe,²² sacrificed at the close of the exhibition?²³ Just south of this a broad flight of steps leads toward the second floor, the "piano nobile," the site probably of important public rooms for official ceremonies, and of balconies or windows where the élite could watch the performances in the Central Court.²⁴ The use of doors to close the foot of this monumental stairway seemed to the French excavators a peculiar, indeed unique, feature; but it is understandable enough if it was intended to prevent an errant bull from charging up to the second story!

To turn now to the Phaistos Central Court. Here we find exactly the same arrangement as at Mallia of alternating columns and pillars along the whole east side (fig. 1). No signs are now to be seen of a barrier in the intercolumniations, but the example of the north portico of Mallia serves to show that this is far from being proof that none ever existed. Between the northernmost pier and the north wall of the court is the entrance to a corridor, 62, and this corridor is blocked by a doorway in spite of the fact that the other two exits from this corridor were also closed by doors.²⁵

The south end of this court is almost entirely destroyed and offers no evidence. The north end (pl. 77, figs. 7, 8) contains but a single doorway which, as at Mallia, opens on a passage leading to a North Court (48). This doorway was not only provided with double doors, the sockets for whose pivots are preserved, but there are a number of cuttings near the south edge of the threshold (pl. 79, fig. 9).²⁶ Perhaps these cuttings were intended for a temporary barrier which would permit the doors to be left open, and thus gain another point of vantage for watching the events taking place in the court.

On the west of the court there must have been, as I have argued in a previous article,²⁷ a fine suite of rooms in the third story, a "piano nobile," as at Mallia and Knossos, reached by a stairway leading up from the Grand Propylon (66-69). Windows, or possibly an open gallery, at its east end would have furnished a fine view of the Central Court.

On the ground floor beneath the piano nobile was a very large and handsome room (25) with a symmetrically-designed façade, inner columns, niched and gypsum-lined walls, and a gypsum-flagged floor in a cruciform pattern (fig. 7). Sometime after the construction of the room the lower part (and presumably only the lower part) of the space between the lateral pillars was walled up, and doors were set up to close the space between the central oval column and the adjacent pillars, a very singular practice, as the excavators observe.²⁸

The doorway immediately to the north of this room, opening on the stairs (39) which led to the

22 [1954] 203-207) laid on the continuous line of dressed stone between the columns.

²⁰ Mallia, *premier rapport* 35.

²¹ Mallia, *deuxième rapport* 10-12, pl. III.

²² Malten *Jdl* 43 (1928) 90-139.

²³ Mallia, *premier rapport* 19.

²⁴ *ibid.* 30-32.

²⁵ *Festós II*, 155-161.

²⁶ *ibid.* 60; but no mention is made of the cuttings on the threshold itself.

²⁷ *AJA* 60 (1956) 151-157.

²⁸ *Festós II*, 67-73.

Grand Propylon, was also closed by a door,³⁹ and doors likewise closed the entrance to the passage (7) south of room 25 (fig. 7).⁴⁰ The rest of the west side was apparently fronted by a portico similar to that on the east side of the Central Court but it is poorly preserved (fig. 1).

The evidence so far presented surely favors the theory that the bull-games took place in the Central Court; in fact I find it impossible to imagine any other reasonable explanation of the facts we have observed. There was no need for the solid wooden barriers, six foot or more high, surrounding the modern Spanish bull-ring; the sort of protection we have described would have been adequate. For in the Minoan sport the bull seems not to have been killed or even tormented; it was a contest in which the human performer, not the bull, took the risks. It was a game of courage and dexterity. Highly-trained acrobats sought to evade the charges of the bull by nimble dodging, or in the exciting climax of the performance actually met the animal head on, seized it by the horns, and utilized the impetus of the beast and the upward toss of its head to hurl themselves high in the air over its back. The representations on Minoan murals, seals, and other forms of art are too circumstantial to be explained otherwise.⁴¹

In the light of this theory perhaps we can also find an explanation of a carefully-built construction in the northwest corner of the Central Court at Phaistos which has remained in spite of numerous suggestions, an enigma (pl. 77, fig. 8 at a, and pl. 79, fig. 10).⁴² Nilsson, in his 1950 edition of *The Minoan-Mycenaean Religion* (p. 118), still clung

to the view that it was an altar, but Miss Banti has pointed out that this is based on a misconception of the evidence of the excavation data, and there is nothing else in favor of this theory. The construction, consisting of several large dressed blocks of stone and some earth-and-rock filling, measures about 2.51 m. long (east-west) by 0.82 m. wide by 1.11 m. high (pl. 78, fig. 11). The narrower eastern part looks like a pair of steps and indeed the top edge of both blocks next the court is heavily worn as if from being so used.

The suggestion might be made that the basis was designed as a haven for a toreador who had got cornered in this blind angle of the court where there was no door to be opened to him nor fence to vault. But, while it may in fact have served this purpose on occasion, I would suggest that the real purpose of the basis was to enable the toreador to lure the bull deliberately into this corner, so that, as one of the manoeuvres of the sport, he might leap from it onto the bull's neck or back.

And that, I would further propose, is just what is represented on the Priene gem mentioned above (fig. 3). The rectangular object in the lower left corner is *not* a trough or tank⁴³ but a platform from which the performer is springing on the bull (pl. 78, fig. 12).⁴⁴ Perhaps it is intended to be the very platform we have been describing, for its face has been decorated, as Evans pointed out, with the identical pattern which occurs so conspicuously, only a few feet away, in two niches (pl. 77, fig. 8 at b, c, and pl. 78, fig. 13) symmetrically set on either side of the doorway located axially on the north façade of the Central Court (see above). Like

³⁹ *ibid.* 75.

⁴⁰ *ibid.* 45; *Festòs* I, pl. 11 shows a cutting evidently for a door-pivot at the northwest corner of the south base.

⁴¹ Persson, *The Religion of Greece in Prehistoric Times* (1942) 94-97. Jacques Aymard, on the basis of Pliny, *NH* 8.182 and Aelian, *NA* 7.4, notes that in some bull-sports of the Roman period "des acrobates danser et voltiger par dessus l'animal" (*EtCl* 23 [1955] 259-266). Some seals found in the Indus Valley also seem to represent acrobats, some evidently female, leaping over bulls and buffaloes, or even seizing them by the horns; Fabri, who has called attention to the resemblance of the scenes on these seals to Cretan representations, would see other points of resemblance (cult trees and birds, and bull-sacrifice) which lead him to suggest some direct influence; but there are chronological difficulties of which he seems unaware ("The Cretan Bull-Grappling Sports and the Bull-Sacrifice in the Indus Valley Civilization," *Annual Report 1934-5, Archaeological Survey of India* [1937] 93-101).

⁴² *Festòs* II, 55f, 585, "la bella costruzione . . . è un enigma:

confesao che no so come spiegarla." The *Guida* (58f) had suggested that it might be "alla ispezione del giudice di campo."

⁴³ As for the concealment of part of the bull's face and forelegs behind the structure, a detail which has suggested to some that the animal was drinking from a trough (see notes 22 and 23), we can interpret this as the artist's attempt to show that the bull had succeeded in placing its forefeet on the lower step of the base.

⁴⁴ Among bull-baiting manoeuvres no longer regularly practised in Spain was a leap from the ground over the head of the bull (*salto al trancuerno*), as well as vaulting over the beast with the aid of a pike (*salto de la garrucha*), and one in which the performer leapt from a table, or sometimes a chair, onto its back and so dropped from its hindquarters. These are discussed and illustrated in a chapter on "Saltos" (777-783) under a general section termed "*Suertes en desuso*," in the first volume of a recent exhaustive three-volume work by José María de Cossío, *Los Toros, tratado técnico e histórico* (Madrid 1951).

the Athenian vases of Theseus and the Minotaur, where the meander obviously points to the Cretan labyrinth as the scene of the exploit, may not, as Cook has suggested,³⁹ our Minoan (Phaistian?) gem-engraver have indicated the locus of the bull-games by the pattern so prominently displayed on the impressive façade of the Phaistos Central Court (pl. 79, fig. 14)?⁴⁰

SUPPLEMENTARY CONSIDERATIONS

SURFACE OF BULL-RING. The surface of the Central Courts at Knossos, Mallia, and Phaistos, the last being much the best preserved, was paved with flagstones. A surface of this nature, it may be objected, would be ill-adapted for such acrobatic performances, being hard on the feet of both man and beast yet not offering a good grip, and also being dangerous to fall on. However it may be suggested that the surface was covered with several inches of sand, like the Roman "arena," at least during the performances. The bed of flagging would make it easy to sweep off the sand when not needed, and likewise prevent the sand from becoming confounded with the clay in wet weather.

OTHER BULL-RINGS. Immediately to the south of the small Palace of Gournia is a long open area termed on the plan, "Public Court."⁴¹ The long axis of the court runs north-to-south, and is rather indefinite in its southern termination but seems to have been at least 40 m. long; its width toward the southern end is about 20 m. Thus again we have the orientation and approximately the dimensions and proportions of the Central Courts of the major palaces. Special investigation might produce some evidence of provisions for confining the bull to the limits of the area during the games; at present there is no such evidence, either positive or negative.

Another possible bull-ring is an area about 16½ m. wide and at least 50 m. long at Plati in the Lassithi Plain. It may actually form the Central Court of a palace, but the exact nature of the surrounding rooms is not clear.⁴²

³⁹ The generally accepted explanation of the Minotaur housed in the "labyrinth" and destroying his victims there, as a reflection of the Cretan bull-games, and the common identification of the labyrinth (the place of the *labrys* or double-axe) as the Palace of Knossos itself, also favors the identification of the Central Court as the site of the games.

⁴⁰ Hawes, *Gournia*, plan at p. 26.

⁴¹ *BSA* 20 (1913-14) 7ff, pl. 1, ma.

Still another possible candidate has been found at Vathypetros, south of Knossos, where Marinatos has located what may be a palace with Central Court; but the plans and photos published in the preliminary articles are not sufficient for detailed study.⁴³

STALLS FOR BULLS. At the eastern end of a complex of rooms on the ground floor of the great rectangular block south of the Grand Propylon at Phaistos is the large, well-decorated room 25 already briefly described (pl. 77, fig. 7). In the west side of the northern half of this room is a large double doorway opening into a broad corridor off which open to north and south two rows of small oblong rooms. One of these (33), at the far northwest corner, was certainly a magazine or storeroom, and storage-jars were also found in 37.⁴⁴ The excavators consider all these rooms to have been magazines, but their shape, so unlike the long narrow magazines west of the Central Court at Knossos and both east and west of it at Mallia, combined with the conspicuous absence of pithoi in most of the rooms, suggests that they may have been built, at least, to serve other purposes as well.

It would also seem strange that such an outstanding room as 25 should have served as the ante-room and sole means of access to a series of ordinary storage-rooms.⁴⁵ It would therefore appear probable that 25 had some distinctive function associated in some measure with the rooms on either side of corridor 26. A clue is perhaps furnished by the fact that the remains of a great heap of grain was found in this corridor as if fallen from a second-floor loft.⁴⁶

Can some of the small rooms have served at least temporarily as stalls for bulls when the bull-games were held in the Central Court? Some provision would be required for housing the bulls; where else can we find a more appropriate location? If the games had any kind of religious basis certain preliminary or subsequent ceremonies might have taken place in the great anteroom, 25. The similarity of its position to that of the room with an altar

⁴³ *Πρακτικά* 1949, 100-109; 1950, 242-257; 1951, 258-272; 1952, 592-610.

⁴⁴ *Festós* II, 90-93, 94-96.

⁴⁵ The excavators at first termed it, because of its size and decoration, the "megaron degli uomini." I have discussed this further in *AJA* 60 (1956) 155.

⁴⁶ *Festós* II, 85f.

(VI 1) at Mallia (see above), and of the Pillar Shrine at Knossos, as restored by Evans, may therefore not be without significance.⁸²

Our restoration in pl. 79, fig. 14 represents a bull being led forth from the imposing façade of room 25. Windows, or possibly a gallery, on the east end of the piano nobile two stories above, and other windows in the symmetrical recesses on the north façade of the Central Court, would provide vantage-points for the Minoan aristocracy watching the games, while large crowds could be accommodated in the porticoes and probable upper galleries ex-

tending along the whole length of the court on its east side and along the southern half of the west side. Whether religious or secular in origin, the bull-games had evidently acquired enormous popularity in the heyday of the Cretan palaces, anticipating by a millennium and a half those more celebrated but also more bloody performances presented in the amphitheater for the delight of a less truly civilized people.

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⁸² At Plati, Vathypetros, and perhaps at Gournia, there are also rooms similar in character and position (see notes 46-48).

Unpublished Gems in Various Collections

GISELA M. A. RICHTER

PLATES 80-82

While writing the *Catalogue of Engraved Gems in the Metropolitan Museum* (1956) I of course had occasion to examine other collections of classical gems. In these studies I came across several unpublished (or inadequately published) pieces of considerable interest—Greek, Graeco-Persian, Etruscan, and Graeco-Roman, the last with designs copied from earlier Greek sculptures or paintings. Each contributes something important to our knowledge of ancient art, and some are of high quality. So I take this opportunity to make them known, and want to express my thanks to the directors of the various museums and the private owners for their generous permission to do so, and for the impressions and photographs with which they have supplied me.¹

I shall begin with perhaps the most important piece, a beautiful chalcedony scaraboid in the National Museum, Naples (pl. 80, fig. 1).² The design consists of a female head in profile, surrounded by a shaded border. The hair radiates from the apex of the head and is looped up behind; wavy strands surround forehead and temples and little stray curls escape from the mass here and there. The eyeballs slightly protrude, lashes are indicated along the lower lid and at the inner corner of the upper lid. The lips are full and short. Above is the inscription Σόσιας, in neat, inconspicuous letters, evidently the signature of the artist.

The preservation is excellent, except for the

transverse curls along the forehead which show considerable surface wear. The date should be in the last two decades of the fifth century B.C., about the time of the head of Hera from the Argive Heraion.³ The letters of the inscription conform with this assignment.

The signature by Sosias introduces a new fifth-century gem engraver known to us by name, the others being Athenades, Dexamenos, Pergamos, and Phrygillos.⁴ Interesting is the marked resemblance between the head on the gem and those on Syracusan coins of the late fifth century B.C., especially with some of those signed by Eumenes and Euainetos (cf. pl. 80, figs. 2, 3).⁵ Not only is the hair-do similar, but there are the same stray curls, short, full lips, and indication of eye lashes. The squarish proportion of the face in our gem is paralleled on figs. 2 and 3, whereas in other coins of that period the proportions are more elongated.

It has long been surmised that the designers of Greek coins—especially those of Sicily and South Italy who affixed their signatures in the late fifth and early fourth century B.C.—were active also in other branches of metalwork.⁶ The techniques of die-cutting and gem engraving are of course closely allied. Occasionally an almost identical design occurs on a gem and on a coin.⁷ There are one or two instances when the same name occurs on a coin and on a gem of the same period and similar style; Phrygillos, for instance, and perhaps Olym-

¹ Mr. Maiuri sent me a cast for fig. 1 and the photograph for fig. 18; Mr. Jenkins casts for figs. 2, 3, 7; Mr. Dikaios the photograph for fig. 8; Miss Vollenweider the photograph for fig. 8a; Mr. Monaco the photograph for fig. 9; Mr. Ashmole impressions for figs. 10, 11; Mr. Boardman impressions for figs. 12, 17; Mr. Caputo impressions for figs. 13, 14; Mr. Bloesch an impression for fig. 15. The enlarged photographs from the impressions and casts are by Mr. Felbermeyer. I have personally examined all the gems here published except those illustrated in figs. 9 and 15. The illustrations of the intaglios show, as is customary, the design as seen in the impressions. The only exceptions are fig. 9, for which see note 25, and fig. 1, for which see note 2.

² 17 by 20 mm.; 7 mm. thick. Only slightly convex at the back; perforated lengthwise. Mr. Maiuri informs me that nothing is known of its provenance. Exceptionally here the photograph was taken from a cast, not an impression; in the impression the direction of the head would have been to the right.

³ Waldstein, *Argive Heraeum*, pl. xxxvi; Papaniridi, *Guide du Musée Nationale*, no. 1571; Richter, *Sculpture and Sculptors of the Greeks*, fig. 165; Picard, *Manuel II*, fig. 327.

⁴ Furtwängler, *Kleine Schriften II*, pp. 185ff; Richter, *Catalogue of Engraved Gems, Metropolitan Museum of Art* (1956) p. xxxv (henceforth quoted as *Cat. of Gems* 1956).

⁵ Cf. Hill, *Coins of Ancient Sicily*, pl. iii; Tudeer, *Die Tetrachmenprägung von Syrakus in der Periode der signierenden Künstler*, in *ZNum* xxx (1913), pl. 1, nos. 4, 12; Rizzo, *Monete greche della Sicilia*, pl. xlii, 4, pl. xliii, 3. I am much beholden to Mr. Jenkins, keeper of the Department of Coins and Medals in the British Museum, for his help in these comparisons between the Naples gem and the Sicilian coins.

⁶ Furtwängler, *Kleine Schriften II*, pp. 143f, and *A.G.* III, p. 126; Richter, *AlA* 45 (1941) p. 375.

⁷ Evans, *Syracusan Medallions and their Engravers*, pp. 117ff, pl. v, 5; Richter, *Cat. of Gems* 1956, no. 76.

pios.⁸ So the Sosias who engraved the Naples gem may also have been a die-cutter, at least he must have been in close contact with the famous coin designers of his time.

The name Sosias is fairly common. The well known potter of that name was a generation or so earlier.

Dexamenos' flying heron in Leningrad,⁹ an unsurpassed masterpiece, testifies to the ability of fifth-century gem engravers to depict animals. He and others evidently delighted in the graceful herons and cranes that were pets in Greek households. To the list of first-rate representations of them so far published¹⁰ I can add two others, both in a private collection. One is an intact carnelian scaraboid, incised on the convex side (pl. 81, fig. 4).¹¹ A heron, with aigrette, curved neck, and lowered head is about to pounce on a fly. The latter is peacefully sitting somewhere, with all four legs outstretched, unaware of what is about to happen. The cautious approach of the bird is admirably conveyed. There is no ground line, and no surrounding border; so the field is unencumbered, and the composition, in spite of the small scale, has spaciousness, suggesting the out-of-doors.

The second stone is a chalcedony scaraboid, engraved on the flat side (pl. 81, fig. 5).¹² The subject is similar to the preceding, but it is composed to the left instead of the right, and the victim in this case is a frog.

Another important piece in the same private collection is a chalcedony scaraboid, turned white through exposure to fire (pl. 81, fig. 6).¹³ It belongs to the much discussed Graeco-Persian class. The design, engraved on the flat side, shows a Persian galloping to the right and turning round in his saddle to spear a fox. He wears trousers, a long-sleeved tunic, a sleeveless, belted jacket, a headdress with flaps (the so-called tiara), and shoes. With

the left hand he holds the reins, in his raised right hand the spear, which has a three-pronged end. The horse has the receding forehead and curving nose that distinguish Persian horses, and the fringed saddle cloth is also a Persian characteristic.

In this representation it is clearly indicated that the coat is sleeveless and that the sleeves belong to the tunic. (The line of demarcation between the two garments may be seen on the left shoulder.) This is the regular Eastern form of dress, not apparently a sleeved jacket over a sleeveless tunic, as some have thought.¹⁴

The attempts at foreshortening in the rendering of the man's trunk, right hand, and right leg bear out the theory that these stones were made by Greeks,¹⁵ for such attempts do not occur on purely Persian gems. In this connection it is interesting to compare a similar representation of a Persian horseman on a stater of Asia Minor (pl. 81, fig. 7),¹⁶ minted, according to some, by the satrap Euagoras of Cyprus (351-349 B.C.).¹⁷ The thoroughly Greek style of the head of Herakles that served as a magistrate's symbol on this coin is, it seems to me, an additional argument for Greek workmanship of Graeco-Persian gems.

In the Nicosia Museum is a fine, banded agate scaraboid with a helmetmaker (*κρανοποιός*), mentioned but not illustrated by Mr. Dikaïos in his *Guide to the Cyprus Museum* (pl. 81, fig. 8).¹⁸ A nude youth is shown seated on a stool (*diphros*), with a cover on it, his feet drawn back; he is holding a Corinthian helmet with his left hand and with his right he grasps a mallet. The helmet rests on an anvil, the curving support of which is seen beneath. The scene is encircled by a line border which also serves as a ground line.

The helmet has already assumed its final form; only a few hammer strokes are needed to finish it. The mallet is of the usual form, the same that appears in the foundry scene in Berlin¹⁹ and that

⁸ Furtwängler, *A.G.* III, p. 126.

⁹ Furtwängler, *A.G.*, pl. xiv, 4; Beazley, *Lewes House Gems*, p. 48, pl. B, 3.

¹⁰ Cf. Imhoof-Blumer, *Tier- und Pflanzen-Bilder*, pl. xxi, 1-17; Furtwängler, *A.G.*, pl. xiv, 2, 4, 11, 17; Lippold, *Gemmen und Kameen*, pl. 95; D. M. Robinson, *AJA* 58 (1953) pl. 25, fig. 63; Richter, *Cat. of Gems* 1956, no. 122.

¹¹ 18 by 13 mm.

¹² 20 by 15 mm. There are several largish chips, but the representation is practically intact.

¹³ 27 by 22 mm. A drawing of it appeared in A. U. Pope and P. Ackerman, *A Survey of Persian Art* I, p. 390, fig. 89.

¹⁴ On this question cf. my *Cat. of Gems* 1956, under no. 132 and the references there cited.

¹⁵ On this debated question cf. *ibid.* p. 33, and the references there cited.

¹⁶ Imhoof-Blumer, *Kleinasiatische Münzen*, pl. xix, 24. I am grateful to Mr. Jenkins for calling my attention to this coin.

¹⁷ E. Babelon, *Les Perses Achéménides*, p. 91.

¹⁸ Page 96, no. 11, in the 1953 edition. The dimensions are 15 by 12 mm.

¹⁹ No. 2294. Furtwängler and Reichhold, *Gr. Vasenmalerei*, pl. 135.

was recently found in Pheidias' workshop at Olympia; but it has an exceptionally long handle. For the curving, presumably movable, support of the anvil one may compare the similar contrivance on an Etruscan stone, also with a helmetmaker,²⁰ and on a sard ringstone in New York,²¹ where a man is represented using mallet and punch to decorate a bowl. In the latter the support is fastened to the seat, whereas on the Etruscan stone it rises from a low base; a large chip obscures that portion on the Cyprus stone.

The action and concentration of the youth are admirably rendered. At first sight one thinks that there is an attempt at a three-quarter view of the trunk, but it is only because the left arm is ingeniously placed along the middle of the abdomen. The date should be around 500 B.C., about the time of the Ptoon 20 kouros and the statue base with the cat-and-dog fight.²² Distinctive at that period is the coiffure, with the hair arranged in horizontal tiers round a spherical skull and rolled up at the back.

Beazley in his publication of the well known helmetmaker by the Antiphon Painter in the Ashmolean Museum²³ compared similar representations on vases and on two engraved gems. The most important addition since that time, besides the stone in Cyprus, is the geometric bronze statuette in New York,²⁴ which, I suppose, is the earliest Greek helmetmaker so far known. The representations on the Etruscan stone cited above and on the Greek scaraboid in Munich mentioned by Beazley (*loc.cit.*) are very close to the helmetmaker in Cyprus.

Two Greek scaraboids of the first half of the fifth century, with similar representations of a youth playing with a dog, are in the British Museum (*Cat.* no. 502) and the Metropolitan Museum (*Cat.* no. 66). In both the youth bends forward, leans on a stick which he grasps in his left hand, and with his right holds out something to a dog. Miss Vollenweider has called my attention to a

third similar example, unpublished, in the National Museum, Athens (pl. 81, fig. 8a). It is a burnt chalcedony scaraboid, 14 by 18 mm., broken at the back. Here the youth is bending forward somewhat precariously, and the connection of the staff with the left hand is not marked. The work is indeed rather cursory, but it is lifelike. The object that the youth is offering to the dog is nondescript (a grasshopper, as in the Alxenor stele?); he is holding it gingerly, and the dog lifts one paw a little hesitatingly. Whereas in the London stone, and especially in the New York one, the three-quarter view is fairly successful and all four legs of the dog are indicated, in the Athens stone a frontal chest is somewhat clumsily attached to a profile body, and only three of the dog's legs are marked. The Athens stone may, therefore, be a little earlier than the other two, perhaps around 490 B.C. The similarity of the representations in the three stones exemplifies once again the frequent use of the same general type in works of the archaic period and later.

In the Museo Nazionale di Antichità di Parma is an Etruscan scarab with a representation of Herakles and a nude, bearded, winged figure inscribed $\tau \iota \epsilon \sqrt{\tau} \wedge$ (pl. 82, fig. 9, from a photograph of the stone).²⁵ Herakles is shown sitting to the right on a rock, evidently in an exhausted condition, his head bent, his right arm hanging loosely down, his left hand supported on his club. He wears the lion's skin draped round his hips, with one paw hanging from his left forearm. The winged daemon towers behind him, holding a little twig in the right hand. Below the group is a thickish ground line and around the scene a shaded border. The date should probably be still in the fifth century B.C. (note the frontal view of Herakles' trunk and the hard transitions between the muscles).

The same subject occurs on several other Etruscan gems of developed style—in London (pl. 82, fig. 10),²⁶ New York,²⁷ and formerly in the Cook

²⁰ Furtwängler, *A.G.*, pl. xvi, 58; Lippold, *Gemmen und Kameen*, pl. 57, no. 13.

²¹ Richter, *Cat. of Gems* 1956, no. 435.

²² Richter, *Kouroi*, no. 131; Papaspiridi, *Guide du Musée National*, pp. 38ff, no. 3476.

²³ *CVA Oxford*, fasc. 1, pl. II, 8. The best general account on metalworking is still Blümner's *Technologie und Terminologie* IV, pp. 360ff.

²⁴ Richter, *Handbook of the Greek Collection* (1953) p. 22,

pl. 13, d.

²⁵ 25 by 16 mm. As the engraving is very shallow (only 1 mm.), the photograph of the impression is far from clear. The photograph taken direct from the engraving has, on the other hand, come out pretty well. I am much obliged to Mr. Monaco for his repeated efforts to obtain the best possible results and for verifying the inscription.

²⁶ 19 by 14 mm. Furtwängler, *A.G.*, pl. xviii, 28. Not included in Smith's or Walters' Catalogues of the British Museum

Collection;²⁸ but the Parma stone is the only one with the name of the winged figure inscribed. When Furtwängler first discussed the London gem in Roscher's *Lexikon* in 1886-1890,²⁹ he called the representation "unerklärt," but was inclined to think that the winged figure might be Thanatos. Later, in his *Antike Gemmen* (1900),³⁰ he favored Hypnos and compared the somewhat similar but later stones in Berlin, where a winged daemon is apparently putting a girl to sleep.³¹ The twig in the daemon's hand in most of the representations with Herakles might also be thought to point to Hypnos if we recall the passages in Virgil, *Aeneid* (V, 854ff) and in Silicis Italicus (*Punica*, X, 356), where a twig dipped in some liquid conduces sleep.

On the other hand, Thanatos is I think also a possibility, for on another gem in the British Museum Herakles appears in the same exhausted attitude sitting on his pyre, presumably preparing to die before his apotheosis (pl. 82, fig. 11).³² The scenes on the gems may, therefore, be considered as preceding in action the representations on vases and other monuments that depict Herakles on the pyre. These were listed by Beazley in his *Etruscan Vase Painting*,³³ and Clairmont, in a recent article on Herakles on the Pyre,³⁴ discussed in detail the most interesting one—the fragmentary Attic stamnos in the Villa Giulia Museum, no. 11688, of about 460 B.C.³⁵ He describes the figure of Herakles as follows: "He is lying dead on the pyre itself; his features are distorted; he wears a lion-skin on his head and around his neck and both his arms hang slack and lifeless over the pyre." It is certainly true that Herakles here appears to be dead; and the same is the case in a representation of Herakles on the pyre on a Roman relief formerly in a private collection in Naples, now in Leipzig.³⁶

One might have hoped that the inscription TIELTA on the Parma scarab would help defi-

nately to identify the daemon. Though the first two letters seem hopeful, there is no parallel for the rest; and one must leave it at that. In any case Thanatos and Hypnos are closely associated in both Greek and Etruscan art. Both, for instance, are represented as carrying the dead;³⁷ and especially in Etruscan art winged figures, male and female, appear without any clear identity, at least as far as in our ignorance of Etruscan beliefs can be ascertained.³⁸

Besides the four Etruscan stones, there is a banded agate ringstone in the Ashmolean Museum with the same subject (pl. 82, fig. 12).³⁹ The representation is very close to that on the stone in the British Museum, but it is evidently later. In the Ashmolean Museum it is called Roman Republican, and I suppose it might be that—an Italic copy of an Etruscan stone, belonging to the class called by Furtwängler Etruscanizing and current in the third and second centuries B.C. On the other hand, the stone might also be an eighteenth-to nineteenth-century copy of the London stone, since an impression of the latter is included in the Cades collection and would, therefore, have been available. There are, moreover, some apparent misunderstandings in the Ashmolean representation, for instance, the lifeless manner in which Herakles holds the club, the chiton-like rendering of the lion-skin across the legs, and the lack of its connection with the paw that hangs from Herakles' arm. The unnatural protrusion of the eyebrows is also odd. Moreover, the modelling is less sure than in the London prototype, and the bevelled edge looked new to me—though that might be due to subsequent trimming.

In the Archaeological Museum in Florence is a Graeco-Roman amethyst ringstone with the bust of an Amazon in profile to the right (pl. 82, fig. 13).⁴⁰ The type is that of the well known statue in the

collection (Mr. Ashmole could not think why). The stone is mounted in an eighteenth-century ring. It is flat-backed and 3 mm. thick (cut from a scarab or scaraboid?).

²⁸ Richter, *Cat. of Gems* 1956, no. 177.

²⁹ Furtwängler, *A.G.*, pl. LXIII, 13; C. H. Smith, and C. A. Hutton, *Catalogue of the Antiquities in the Collection of the late Wyndam F. Cook II*, pl. II, 46; Christie's *Sale Catalogue of the Cook Collection* (July 14-16, 1925) no. 45. The present location of the gem is not known to me.

³⁰ S.v. Herakles, cols. 2241f.

³¹ Text to *A.G.*, pl. XLIII, 28.

³² *Ibid.* pl. XXX, 53, pl. XXXVI, 20.

³³ *Ibid.* pl. XVI, 64; Walters, *Catalogue*, no. 622.

³⁴ Pp. 103f.

³⁵ *AJA* 57 (1953) pp. 85ff.

³⁶ Della Seta, *Museo di Villa Giulia*, p. 320.

³⁷ *Annali dell' Inst.* (1879) pl. E, 2; Furtwängler in Roscher's *Lexikon* I, s.v. Herakles, col. 2241; Beazley, *Etruscan Painting*, p. 104, no. 10.

³⁸ Waser, in Roscher's *Lexikon*, s.v. Thanatos, cols. 498ff.

³⁹ Cf. e.g. Giglioli, *Arte etrusca*, pls. CCCXXV, 3, CCCXLVII; Furtwängler, *A.G.* pl. XVI, 22, 23. Even in Greek art the identity of winged figures is not always clear; cf. e.g. Levi, *Annuario*, XXXIII-XXXIV, N.S. XVII-XVIII (1955-1956) fig. 66; Ellinger in *Studies in honor of D. M. Robinson* II, pp. 1185ff; Walters, *Catalogue of Engraved Gems*, no. 497.

⁴⁰ 1941.658. 25 by 17 mm. Sir Arthur Evans Bequest. Provenance unknown.

⁴¹ No. 334 of the Currie Collection. Diam. 14 mm.

Capitoline Museum⁴¹ by some attributed to Kresilas, by others to Polykleitos.⁴² As in the statue, so on the gem, the hair is gathered up behind and a mantle is draped round the shoulders and chest. In the field is a monogram (ligature of A T P) and a pair of scissors, which evidently had some connection with the owner of the seal.

An almost identical representation (without monogram and scissors) occurs on a stone formerly in the Demidoff collection, published by Furtwängler.⁴³ In both these gems the mantle is rendered as in the statue in a perfectly logical manner. In two other representations, on the other hand, though the general type is the same, there are curious variations, perhaps due to misunderstandings by a modern copyist.⁴⁴

Another unpublished gem of considerable interest in the Archaeological Museum of Florence is a sard ringstone with the Wooden Horse of Troy and seven Greek heroes (pl. 82, fig. 14).⁴⁵ Only the forepart of the horse is represented, with a portion of the door-like opening on one side of its body; in the background is the battlemented wall of Troy. The large size of the horse contrasts with the diminutive scale of the men. From a ladder placed against the opening in the horse three of the heroes are descending (the ladder and heroes are, like the door, shown only in part); a fourth has reached the ground and is seen walking to the left; two others are climbing a second ladder, placed, it would seem, against the Trojan wall (or the front of the horse?); and a seventh is cautiously climbing up a third ladder, placed against the wall; he holds up his shield to ward off a sudden attack from above. The heroes wear helmets and carry round shields; some have swords, others spears. The little rounded support under the horse's leg is a roller.

The scene is evidently an abstract from a larger composition, perhaps a painting. In spite of its

sketchiness it is full of life; the proud bearing of the horse and the stealthy action of the nimble heroes are convincingly rendered. The work is presumably of the Roman period, copied from a Hellenistic work.

To the lists of representations of the Wooden Horse, mostly Hellenistic and Roman, given by Overbeck and others, several can now be added, including one on a stone relief in Pakistan and one—if it is one—on a geometric fibula.⁴⁶ There are only a few on gems—an Etruscan scarab in New York,⁴⁷ a carnelian ringstone in Berlin,⁴⁸ and a glass ringstone of which the present location is not known.⁴⁹ The last resembles the Florence stone in style, but is differently composed.

An odd feature in the Florence representation is that some of the men are scaling the wall; for, according to the accounts in the *Little Iliad* and the *Odyssey* (VIII, 493ff), the wooden horse was brought inside the citadel and the Greek heroes emerged from it in the dead of night and opened the gates of the city to let the Greek army in. In the two other representations where a ladder is shown it is placed against the opening in the horse; there is no scaling of the walls. The same variation as in the Florence gem appears on the glass ringstone mentioned above, where a female figure, with both arms raised (Kassandra?), is shown on the wall. A woman in a similar pose of despair is introduced on the stone relief from Pakistan. Do these renderings go back to some other tradition?

In the collection of Professor Roß in Switzerland is a fine carnelian mounted in its original gold ring—with a remarkable engraving of a young boxer sitting on a backless throne (pl. 80, fig. 15).⁵⁰ His body is shown in three-quarter view to the right, whereas the head is turned in the opposite direction. He wears boxing gloves, but is otherwise nude, his mantle being draped around him on the

⁴¹ Helbig, *Führer*³, no. 252.

⁴² On the attribution cf. my *Catalogue of Greek Sculptures in the Metropolitan Museum*, p. 37.

⁴³ A.G., pl. XL, 24; Lippold, *Gemmen und Kameen*, pl. 41, no. 9. Its present location is not known.

⁴⁴ On this question cf. my *Cat. of Gems* 1956, no. 428.

⁴⁵ No. 129. 24 by 17 mm.

⁴⁶ Overbeck, *Die Bildwerke zum thebanischen und troischen Sagenkreis*, pp. 607ff, nos. 83-94, and *Galerie*, pl. 25; Weizsäcker in Roscher's *Lexikon*, s.v. Epeios, cols. 1279f; Wagner in Pauly-Wissowa, *RE* V, 2, s.v. Epeios; *CVA*, Cabinet des Médailles, fasc. 1, pl. 18; Hampe, *Frühe griechische Sagenbilder in Böotien*, p. 50, pl. 2; Mortimer Wheeler, *Rome beyond*

the Imperial Frontiers, p. 161, pl. XXXIV (the horse is set on large rollers); Richter, *Cat. of Gems* 1956, under no. 164.

⁴⁷ Richter, *loc. cit.*

⁴⁸ Furtwängler, *Geschnittene Steine in Berlin*, no. 6887 = Overbeck, *Bildwerke*, p. 614, no. 94.

⁴⁹ Furtwängler, A.G., pl. XXXVIII, 6 = Overbeck, *Galerie*, pl. 25, no. 19.

⁵⁰ 20 by 26 mm. I have not seen the original and owe my knowledge of it to the kindness of Mr. Bloesch. He tells me that it is said to have been found in a sarcophagus on the Sacred Way between Athens and Eleusis, and was acquired long ago by Sir Arthur Evans.

seat. The strong torsion of the figure, the animated face, and the elaborately turned legs of the throne⁵¹ point to the Hellenistic period.

Similar seated youths, but with a sword instead of the boxing gloves, appear on three other ringstones: a garnet formerly in the Beverly collection,⁵² a sardonyx in Berlin,⁵³ and a black jasper in New York (pl. 80, fig. 16).⁵⁴ Furtwängler thought that the youth might be Achilles, and there is indeed something heroic in the attitudes of the figure; but the youth in Switzerland cannot be Achilles, for he is designated as a boxer by his gloves. He recalls in fact the bearded boxer on a glass gem in the University Museum of Göttingen⁵⁵ that so strikingly resembles the bronze statue of a boxer in the Terme Museum.⁵⁶ There is, moreover, a burnt chalcedony scaraboid of the fifth century B.C. in the Ashmolean Museum where the same motif of a seated youth appears and where he is designated as a victorious athlete by the fillet in his hair (pl. 80, fig. 17).⁵⁷ Evidently here again the same general but not identical type was used for several figures.

My last piece brings us from the heroic to the later genre conceptions. It is a sardonyx cameo in the National Museum of Naples with a charming scene of Aphrodite, two attendants, and baby Erotes (pl. 81, fig. 18).⁵⁸ In the centre is Aphrodite, seated on a rock, in three-quarter view. With her right hand she is holding down the lid of a round receptacle inside which is a flying Eros; her head is turned to watch the efforts of her companions to recapture two other Erotes that have escaped from the receptacle onto a tree. One of the attendants, in three-quarter back view, is using a stick to induce an Eros to come down from the tree, while

he is trying to escape. The other attendant, in profile view, is stretching out both arms to catch another Eros who is trying to fly away. The three female figures have mantles loosely draped round the lower parts of their bodies and wear bracelets; Aphrodite also has a necklace. The Erotes are nude. There is a thick ground line.

I had wondered how to interpret the lower part of a sardonyx in New York (pl. 81, fig. 19).⁵⁹ The Naples cameo gave the clue, for the compositions are similar in every respect, except that the New York cameo has an exergue with growing plants and a bucranium.

The subject is typical of the Hellenistic period when the mighty Eros of early times had multiplied and become a mere genre figure.⁶⁰ In the *Anakreonica* XXV, he is described as multiplying like chicks in a nest. Moschos (I) makes Aphrodite say that the escaped boy Eros must be punished. Baby Erotes in a nest are depicted in Pompeian paintings⁶¹ and on a marble candelabrum in the Vatican is a nest with wingless Erotes.⁶²

Unruly Erotes occur also on engraved gems and Pompeian paintings, where they are represented as being punished or offered for sale.⁶³ In the painting from Stabiae,⁶⁴ there is a cylindrical receptacle, a kind of cage, as in the Naples cameo, with one of the Erotes still inside it.

This purely human aspect of Eros naturally had special appeal for the eighteenth and nineteenth centuries. The Stabiae picture, for instance, was copied in 1762 by Nolli,⁶⁵ and was reproduced in a crystal engraved gem of the eighteenth to nineteenth century, now in the British Museum.⁶⁶

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Wandgemälde Campaniens, pp. 163ff, nos. 821-823; Hermann, *Denkmäler*, p. 26, pl. 17. Cf. also A. B. Cook, *Zeus* II, p. 1049. The idea of Erotes escaping from a receptacle goes back to at least the late fifth century B.C. (as Miss Speier pointed out to me), cf. the red-figured squat lekythos from Tarentum, Wuileumier, *Rev. arch.* (1936), p. 146f (in this case a chest). The multiplyings of Eros began even earlier, cf. e.g. Greifenhagen, *Griechische Eroten* (1957) fig. 51.

⁵¹ Lippold, *Sculpturen des Vatikanischen Museums* III, 2, nos. 3, 19.

⁵² Hermann, *op.cit.* I, pl. 1, p. 6, fig. 1; II, pl. 199, a,b; Lippold, *Gemmen und Kameen*, pl. xxviii, 12; Walters, *Cat. of Gems* no. 3499.

⁵³ Hermann, *op.cit.* pl. 199, b; Elia, *Pitture di Stabia* (1957) pl. xl.iii.

⁵⁴ *Le Antichità di Ercolano* (1762) III, pl. 7; Fiske Kimball, in *Studies for D. M. Robinson*, p. 1256, pl. 98.

⁵⁵ Dalton, *Catalogue of Engraved Gems of the Post-Classical Periods*, no. 660 (illustrated in the text).

⁵¹ e.g. Seltman, *Greek Coins*, pl. XLVIII; Newell, *The Coinages of Demetrius Poliorcetes*, pl. 1.

⁵² Furtwängler, *A.G.*, pl. XLIII, 18.

⁵³ *ibid.* pl. XLIII, 22.

⁵⁴ Richter, *Cat. of Gems* 1956, no. 408.

⁵⁵ Croire, *Göttinger Gemmen*, no. 58; Richter, *Ancient Italy*, p. 69, fig. 214.

⁵⁶ Helbig, *Führer*, no. 135.

⁵⁷ Furtwängler, *A.G.*, pl. XII, 24. I illustrate it here from a better impression than that from which Furtwängler's illustration was made.

⁵⁸ Inv. no. 25858. Diam. 24 mm.

⁵⁹ *Cat. of Gems* 1956, no. 612.

⁶⁰ Cf. e.g. Furtwängler, *Eros in der Vasenmalerei*, and in Roscher's *Lexikon*, s.v. Eros, cols. 1365ff; Hermann, *Denkmäler der Malerei*, pls. 22-26, 35, 37, 64, 65; Lippold, *Gemmen und Kameen*, pls. 26-30; Speier, in a forthcoming article in the *Enciclopedia d'Arte*.

⁶¹ *Ann. dell'Inst.* (1829) pp. 251ff, tav.d'ag. E,1; Helbig,

New Light on the Ancient History of the Eurasian Steppe¹

E. D. PHILLIPS

THE Eurasian steppe is a region of perennial interest to ethnologists, prehistorians, and even historians, but because of its immense area and the variety of the civilizations which have been exposed to invasion from its inhabitants, it is not often treated as a whole in books or articles intended for a wider public. It is my hope in the present article, as an interested beginner in this study, to do something to fill the gap with a brief and very general account of recent discoveries and theories concerning the history of the steppe from the beginnings of pastoral nomadism down to the Hunnish invasion of Europe. It is not a subject that anyone can claim to exhaust, and I merely make use of such books and articles as have come my way, without any claim to completeness. For later periods, where more political history is known, I have not had space for much archaeological material. Nor can I follow the history of the Huns after their invasion of South Russia.

The steppe between the northern forests and the southern regions of mountain or desert or cultivated land extends across Eurasia from Hungary to Manchuria, and falls into two great regions, which, in the period now considered, have different histories. The western half begins between the Balkans and Carpathians with Hungary and extends across Roumania and south Russia to east Russia between the Caucasus and the southern end of the Urals; it continues through southwestern Siberia and Kazakhstan, north of the Persian plateau, to a barrier consisting of the Pamir, the western Tien-Shan, the smaller ranges that partly block Zungaria, and the Altai. It is bounded on the north by the Russian and Siberian forests which reach as far as the Altai. The eastern half has two great divisions, a southern one stretching eastward from the Pamir north of Tibet and south of the Tien-Shan through the

Tarim basin, or Kashgaria, including the Takla Makan desert to the northwest of China, and a northern one, running north of the Tien-Shan through the Semirečie and Zungaria to northwest China and Mongolia, where it is continued by the Gobi desert and Manchuria. This eastern half is considerably higher and harsher in climate; it contains more desert, though this is divided by mountains, and to the north the transition from steppe to forest is made more abrupt by bordering or encroaching mountains such as the eastern Altai and Sayan and the Khingan. Thus it contains no large comparatively lowlying areas suitable for agriculture such as the western steppe has in western Siberia and in south Russia, or in different conditions, near the Aral Sea. Southward the border between the steppe and the cultivated lands of China is much more definite, and nomads who have crossed it have not remained long in their original state unless they returned.

Recent work on the history of particular parts of the steppe has been done almost exclusively by Russians, since such regions are mostly in Soviet territory. Western scholars are much indebted to those of their colleagues who have read widely in Russian archaeological writings and have produced summaries and discussions of these, sometimes with comprehensive bibliographies. Among these particular gratitude is due to F. Hančar,² K. Jettmar,³ and R. Ghirshman,⁴ who in their reports have added to the surveys of Minns⁵ and Rostovtzeff⁶ much new material from discoveries in Siberia and Central Asia. It is now for the first time becoming possible to see the entire history of nomadism on the steppe in some sort of outline, though there is still unlimited room for addition and alteration of detail. Its origin is now sought less among the hunters of the northern forests than among fairly seden-

¹ This article gives the substance of a lecture delivered in November 1954 to the Ulster Archaeological Society. Direct references are to work in western languages which includes summaries of books and papers in Russian. The last are mentioned by name only when they are specially important.

² Hančar 1950.

³ Jettmar 1950, 1951, 1952 A and B.

⁴ Ghirshman 1951, 1953.

⁵ Minns 1913, 1942.

⁶ Rostovtzeff 1922, 1931.

tary communities which had developed a mixed economy of agriculture and stockbreeding in the more fertile parts of the steppe. That is not to say that there were not peoples who took up nomadism directly from hunting and foodgathering, but only that these are more likely to have learned it from others than to have invented it themselves.

Thus O. Lattimore suggested that the Indo-European nomads, who are the first certainly known on the steppe, began as dwellers in oases in Central Asia who found, as the climate grew drier, that agriculture was ever less rewarding, and that animals must be moved ever further and more often to find sufficient pasture. He derived the Altai nomads from forest peoples who learned nomadism from the Indo-Europeans on the northern edges of the eastern end of the western steppe. In his view, only cultivators living in long and peaceful contact with animals that grazed all too familiarly among their plants could take the step of taming them; hunters would never be on such a footing.⁷

Something of the same view is found among Soviet scholars though they do not favour such desert regions. They look for the origin of intensive stockbreeding in glens and valleys among the plateaux of the steppe, from which some herders, as population grew, would move out onto the open steppe, leaving the others as cultivators to whom cattle were less important. By increasing differentiation, cultures of opposite kinds would arise eventually from the same mixed economy. They see no reason for preferring one area to another as the scene of this change, provided that the physical conditions are satisfied, and until recently were unwilling to believe even in the best authenticated migrations, when on Marxist principles it could be argued that economic change everywhere produced the same effects. Nor do they lay much stress on changes of climate as has been customary in the discussion of early cultures in Asia.⁸

They have an elaborate theory of the development of aristocracies from groups of clans, of separate families from clans, of patrilinear descent from matrilinear, all of them social transformations determined by economic change. They do not agree

that all full nomads are patrilinear in their system of kinship and rights, as the Indo-Europeans and Semites mostly were by the dates when they became known to us. Many prehistorians certainly hold that a great development of the clan system was part of the advance made during the neolithic stage.

Thus it is likely that nomadism originated from a mixed economy that included agriculture, and was for long a matter of degree. It is significant that in the Indo-European languages the words for ploughing and sowing are among those most widely spread, so that those Indo-Europeans who became specialized as mounted nomads are an extreme case.

In the physical anthropology of the steppes and forests Russian scholars have made important progress. The investigations of G. F. Debetz and others have shown that the Mongoloid type of humanity extended by neolithic times from eastern Asia westward through the Siberian *taiga* to European Russia and even the Baltic, and that in the south there were already Mongoloids in the Ural forests at the time of the Ananyino culture, contemporary with the Scythian period in south Russia.⁹

But on the steppe the distribution was different. West of the Zungarian Gates, between the Altai and the Tien-Shan, Mongoloid peoples do not appear in any force until the Hunnish invasions. East of this boundary Manchuria and northern and eastern Mongolia were inhabited by Mongoloids, but western Mongolia and Kashgaria appear to have contained white populations until a late period, and not all of these represent an eastward penetration of Indo-Europeans. The Wu-sun and Yue-chi of north-west China, who are mentioned in Chinese sources as having red hair and blue eyes, are generally regarded as Indo-Europeans of Nordic stock arrived from the west, but in Kashgaria the people, although they once spoke dialects of the Iranian group of Indo-European, were of another white type, the Armenoid, with round heads, thick beards, and prominent noses, as the people of the Pamir at the western end of this region still are. In Mongolia itself the earliest speakers of the Turkish group of Altaic languages are also reckoned by some authorities to have been Armenoids, for the Chinese men-

⁷ Lattimore 1940, pp. 326-28 and 458-59.

⁸ See Hančar 1950 p. 72 for the views of A. A. Iessen and A. A. Miller, and pp. 68-69 for those of I. I. Melčanninov and others, developed from the study of the Japhetic languages, those of the oldest stratum of population in south Russia and the Caucasus.

⁹ See, for instance, Gordon Childe, 1954, p. 20, quoting *inter alia* Debetz, *Kratkie Soobščenniya* 9 (1941) p. 15, Trofimova, *Sovetskaya Etnografiya* 3 (1949) p. 72, and Shruueva, *Istoriya Naseleniya Prikamya v Ananyinskuiu Epokhu* (*Materialy i Issledovanie po Arkheologii SSSR* 30 [1952]) p. 189.

tion the beards, prominent noses and hairy legs of the Hsiung-Nu. These by later interbreeding with northern Chinese and Mongol tribes had acquired Mongoloid features by the time they crossed Central Asia to Europe as the Huns.¹⁰

The scheme now current for the chronology of culture on the steppe is the work of the Russian excavators of Siberian and Central Asian sites, and I reproduce it here as framed by Kiselev in his *Ancient History of Southern Siberia*.¹¹ Local manifestations have been specially studied for the western steppe by S. P. Tolstov¹² in the Aral region, by A. N. Bernštam¹³ along the Pamir and Tien-Shan, and by S. I. Rudenko¹⁴ in the Altai; in the eastern half by A. P. Okladnikov¹⁵ in Mongolia and eastern Siberia. These have their analogies in European Russia, but progress there has been much less spectacular because of previous knowledge.

In the neolithic period, contemporary with the beginnings of civilization in western Asia, man was still a hunter in Siberia, using spears and arrows tipped with bone, rounded stone axes, and various bone tools, though these are less frequent, along with a crude pottery. Further south in the delta of the Amu Darya was the Kelteminar culture of hunters and fishermen, described by Tolstov,¹⁶ which used microliths of a kind distributed from the Indian Ocean to the Gobi, but which also shows the influence of the cultivators of Anau, near Merv, further south, who made red and black pottery and wove textiles. Pottery of a similar kind has been found both in Kansu and Honan in China and in the Ukraine. The Tripolye culture of the Ukraine also belongs to this period. This was one of stockbreeders and cultivators living in wooden framed houses whose walls were filled in with clay and which were roofed with wattle; its pottery was ornamented with geometric patterns.¹⁷ In the Caucasus this is the age of dolmens which must have been erected by a fairly dense and settled population.¹⁸ In the Far East the tradition of the Siberian palaeolithic seems to have been carried on and developed only slowly into the neolithic; the native

population of Baikal and Manchuria has left Mongoloid skeletons from this age, with remains that show only hunting and fishing.¹⁹ The beginnings of Chinese civilization must fall in this period, but definite indications earlier than the Shang period, which begins about 1500, are lacking.

The next stage is known in Siberian terminology as the Afanasievo period and occupies the third millennium and some of the second down to 1700 B.C. It is named, like the two succeeding periods, after a site in the Yenisei basin, an area which has yielded most important information on the Siberian Bronze Age. It corresponds with the later part of the Tripolye period in south Russia, and with part of the Kelteminar period in the Aral region. It is known only from graves, oval or rectangular trenches covered with stone slabs; some burials are individual, some collective, and the skeletons usually have their legs drawn up. Its simple painted pottery, red or with white bands, recalls that of Susa and Sialk in Iran, of Anau, and of Transcaucasia. There are bones of large domestic animals, but no certain signs of agriculture. Yet these people used copper for needles, spirals, and small ornaments and seem to have mined it and crushed the ore with stone sledge hammers.²⁰ Kiselev reckons that agriculture as well as stockbreeding began in this period as the result of influence from the southwest.²¹ In the western steppe it is significant that the Tripolye culture at this time gradually breaks up into a number of mobile and even nomadic cultures. This is the age of the graves containing "painted skeletons," stained with red ochre, belonging to tall long-headed herdsmen who had domesticated horses of a primitive type, though it has not been shown that they rode them. The human types on the western steppe were white and even in the Yenisei region the same; in the Altai the type resembled the old Cro-Magnon man of Europe. Stone battle-axes are found of this date in south Russia and in the Minussinsk region, which again suggests western influence.²²

The next phase in Siberia, which begins about

¹⁰ See Minns 1913 p. 100 and 96 (illustrations) and McGovern 1939 pp. 95-96 (with illustration opposite p. 138), 474-75, and 110-11.

¹¹ *Drevnyaya Istoriya Yuzhnoi Sibiri*, Moscow 1949 (new ed. 1951).

¹² *Ancient Chorasmia (Drevny Choresm)* Moscow 1948.

¹³ For his publication see Jettmar 1951 p. 214.

¹⁴ See Jettmar 1951 pp. 217-18.

¹⁵ See Jettmar 1951 p. 217.

¹⁶ See Ghirshman 1953 I p. 232.

¹⁷ See Vernadsky 1943 pp. 21-22. Minns 1913 pp. 133-42.

¹⁸ Vernadsky 1943 p. 23.

¹⁹ See Jettmar 1951 pp. 136-139.

²⁰ For fuller details see Jettmar 1951 pp. 139-41 and Ghirshman 1951 p. 170.

²¹ Ghirshman *loc. cit.*

²² Vernadsky 1943 p. 33.

1700 B.C., is named after the site of Andronovo on the upper Yenisei. This is some centuries later than the earliest appearance of Indo-European peoples in Greece and Asia Minor, now dated about 2000 B.C., and still more distant from the original formation of the whole group of these with their languages and culture, which should be contemporary with the latter part of the Afanasievo culture in Siberia and the dissolution of the Tripolye culture in the Ukraine. It is possible that the increasingly nomad element on the Russian steppe then spoke Indo-European languages, and that most of the more settled cultivators spoke languages of the Japhetic or Asianic group of western Asia.

The nomadic phase in the history of the Indo-European peoples is a very important one, explaining for one thing their wide distribution, parallel to that of the Semites on the southern steppe or to the later spread of Altaic nomads on the northern. Their later history shows a parting of the ways, for most of them, as in India, Iran and Europe, abandoned nomadism to create famous civilizations, but some, particularly of the north Iranian group, ended their separate existence as mounted nomads of the most specialized kind. During this period the use of the horse for drawing light war-chariots was invented, probably in central Asia among the Indo-Iranian branch while they were still pastoral nomads. The necessary wood must first have come from the north Persian mountains, the Hindu Kush, or parts of Zungaria, which would be nearer than the northern forests. These charioteers arrived as the Aryan conquerors of northwest India, north Syria and north Mesopotamia; and other powers of the Near East, such as the Hittites, learnt chariot-driving from them, so that it eventually reached the Mycenaean Greeks and spread northwestward into Europe. Eastward the light war-chariot reached the Shang state in China, as the earliest Chinese writing and tradition show.²³ The war-chariot itself, with heavy solid wheels made of two wooden semicircles, and drawn by asses, was known to the Sumerians of Mesopotamia in the third millennium B.C.²⁴

The Andronovo culture was very widely spread in western Siberia, reaching also east Russia and the Caucasian steppe westward and the Aral depression southward. It was in its typical mani-

festations more settled than the previous culture, so that Russian archaeologists regard it as the completest example of mixed economy on the steppe. The physical type associated with its known material is still European. Some of the old Cro-Magnon type persist in the Altai, and other white races of slighter build and smaller stature elsewhere. There is now also a spread of broad-headed population from the region of the Pamir through the western steppe; these are the later Armenoids and Alpines of the Near East and Europe. The eastern limit of this culture is the Altai, Zungaria, and the Pamir, so far as is known; and it is confined to the steppe, including such enclaves of it as the Minusinsk depression.

Andronovo remains show more copper, cast as well as forged. Small foundries were made in holes in the ground, and moulds for bronze sickles have been found as well as the sickles themselves. Socketed celts became common, the first tool of much use for felling large trees to be known in the north. The graves are found in groups, covered with stone slabs, and the bodies are buried in hollowed tree-trunks. Most graves are flat and surrounded with low rings of stones, and contain large brown pottery incised with simple geometric patterns. Toward the end of the period great barrows appear, which may indicate a powerful aristocracy. The Andronovo phase is generally reckoned to end about 1200 B.C. in the Yenisei and in the Altai where it is overlaid by the next culture, that of Karasuk, but further west it continues as the foundation from which more nomadic cultures were developed by that polarization within the mixed economy that the Russians emphasize.

Toward 1200 important developments at each end of the steppe begin to affect the Andronovo culture. In the west there is a great expansion eastward and southward of the Indo-European peoples who had founded the urn-field culture of east central Europe. This resulted not only in the eventual destruction of the Mycenaean and Hittite powers south of the Balkans but also in movements on the Pontic steppe. The carriers of this movement were certainly Illyrians and Thracians, and perhaps others. In the Near East this is the period when iron, long used in the northern provinces of the Hittite empire, began to supersede copper or bronze over mosaic "The Standard" in the British Museum.

²³ See Creel 1936 pp. 150-54, 1938 pp. 185-88.

²⁴ See for instance Chr. Zervos 1935, plates of the Sumerian

wide areas; on the steppe the process was no doubt slower, but iron would be eagerly sought. On the Pontic steppe and in Hungary it is likely that mounted nomads began to appear not long before 1000 B.C. Among these were the Cimmerians, perhaps of Thracian speech, though some consider them Iranian, who dominated the Ukraine until about 700 B.C., when they were displaced by the Scythians. It is possible that the first mounted nomads appeared somewhere in this region, but there is no certainty.

During the same period in the east, perhaps under the military pressure of the Shang state of China, which seems to have made human sacrifices of its prisoners of war, a new human type with a new culture begins to appear in the Minussinsk basin. The physical type is for the first time Mongoloid, slightly built and with a narrow forehead, like types still common in north China and Korea. The graves of this culture, named after the river Karasuk, a tributary of the Yenisei, are more numerous than those of the Andronovo period, and indicate an increase of population. They too are covered with stone slabs; the dead are buried extended or crouching, or are sometimes cremated. Inward-curving knives, some with handles carved as animals' heads, are found of a type previously unknown in the Minussinsk region but recalling those known in the Anyang region of China, the seat of the Shang and Chu dynasties on the Hwang Ho. Daggers, arrow-heads, and stone pillars with stylized carvings of human faces, found by the graves, point in the same direction. The metal is still copper or bronze. The Karasuk population, a mixture of the newly arrived Mongoloids of the north Chinese type with the previous whites, were cultivators and stockbreeders who did not use the horse; at any rate no bones of it are found in the remains. Thus for the first time Chinese culture contributes an important element to life at the limit of the western steppe, which had previously shown no outside influences but those of western Asia and Europe.²⁵

The end of the Karasuk period on the Yenisei overlaps with the beginning of the next period on the steppe, the first phase of mounted nomadism. During this age the western steppe is dominated by confederacies of mounted nomads, the first of

their kind. In the Minussinsk region the nomad culture is named after the lake and island of Tagar, in the Altai after the Maiemir steppe, in the Semirečie it is the Saka period, in Kazakhstan the Sauromatian, in Chorasmia the age of habitable fortresses, on the Pontic steppe the Scythian period. This too is the time when the celebrated Scytho-Siberian Animal Style appears all over the steppe, carried evidently by the new societies. It represents in small ornaments, pieces of harness, pole tops and, where they are preserved, pieces of leather and felt and textiles, animals in various tense, bent, or contorted postures, often in combat in twos or even threes, sometimes well known and obvious creatures, sometimes fabulous monsters such as griffins. It has been variously connected with totemism, hunting-magic, shamanism, and other beliefs and habits of thought found among the northern nomads, ancient and modern. The local cultures of this age all have their varieties of it, and its origin is traced by conflicting authorities to the Pontic steppe, Central Asia, northern Siberia, or China, with a balance of probability in favour of Central Asia.²⁶

The problem of the origin of mounted nomadism is by no means solved. The only certain conclusion is that it arose on the western steppe, for on the eastern the Hsiung Nu appear as late as the sixth century B.C. in Chinese records as footsoldiers who could be confidently assailed in chariots, as the northern barbarians had been for centuries before by the Shang and Chu dynasties. At this date the Scythians were ruling the Pontic steppe as a mounted horde which had also for a time overrun western Asia. It might be thought that anyone who possessed tame horses would ride them as soon as drive them, but this does not seem to be borne out by history. It is likely, as Jettmar argues, that any people which developed cavalry for warfare would be irresistible, especially on the steppe, and that its neighbors in such a mobile style of life would be forced to learn the technique of mounted fighting to maintain themselves at all. This should have brought about a very rapid spread of mounted nomadism and its accompanying warlike organization over great distances, just as in North America riding immediately spread among the Indians of the prairie, once a few tribes had learned it from the

²⁵ See Ghirshman 1951 pp. 171-72. Jettmar 1950 and 1951 pp. 145-48.

²⁶ See Borovka 1928, Rostovtzeff 1929, Minns 1942, *passim*;

also Hančar 1950 pp. 74-77 for recent articles. The style does not occur with "Cimmerian" remains.

Spaniards.²⁷ It is likely that the Mongoloid and mixed peoples of the eastern steppe learned it from the Iranian nomads in the interval between the sixth and fourth centuries, for by 300 B.C. they were expert cavalrymen.²⁸

The spread of mounted nomadism, perhaps from the Caucasian steppe, would naturally first reinforce the white element at the limit of the western steppe. This is what archaeology shows in the Minusinsk region at the end of the Karasuk period.

This too is the time when the last considerable movement of European peoples eastward across the steppe appears to have taken place. A complex of weapons, trappings and ornaments, characteristic of eastern Europe and the Caucasus, is found spreading eastward across the north of Central Asia to China, late in the Karasuk period according to the present reckoning, but before the spread of the Iranian mounted nomads, to judge by the absence of typical Scytho-Sarmatian features in the objects found. The connection between the various finds of axes, picks, daggers, belt-clasps, cross-shaped tubes, buckets, decorative motifs and other features of the Late Bronze and Early Iron Ages of eastern Europe and the very similar objects found in China, dated to this period, and having no previous tradition there, has been discussed by many archaeologists and most recently by R. Heine-Geldern,²⁹ who summarizes their conclusions. He makes their carriers Indo-Europeans and riders, including Caucasians, Cimmerians, Thracians, Illyrians and even Germans, as well as the ancestors of the Tocharians of the Yue-Chi horde. The last appear in Kansu later as mounted nomads, east of the Iranians and yet speaking a western or *centum* type of Indo-European language. This movement would have begun soon after 1000 B.C. and have occupied a little more than two centuries. It would be the eastern aspect of the last phase of the expansion of the urn-field peoples that had already driven the Dorians into southern Greece and the Phrygians into Asia Minor. This date would correspond with the period of Cimmerian rule on the Pontic steppe and of the unknown pre-Scythian riding people³⁰ who occupied Hungary and may be the "proud mare-milkers" of Homer.³¹ But the relation of the whole movement with the later spread of Iranian nomads is obscure; that may have been partly a reaction to it, for in south Russia the Scythians are

the first of many nomad hordes who arrive from the east.

The main beneficiaries of the new technique were certainly the Iranians who inhabited Central Asia after their near kinsmen the Aryans of northern India and Mitanni had left to make their fortunes. It was now the turn of the Iranian Aryans to do the same, helped by the new arm of cavalry, and from 1000 B.C. onward the ancestors of the Medes, Persians, and other Aryans of the Iranian plateau gradually established themselves there as the rulers of the earlier Asianic inhabitants. With them appears the same round-headed type which is known in Siberia with the Andronovo culture, and links with this culture persist among the northern Iranians of the Scytho-Sarmatian group, who became much more specialized as mounted nomads than ever the Persians had been. The Iranians were probably the inventors of the characteristic trousered dress found among all the mounted nomads. Some of the northern Iranians followed their kinsmen across the Caucasus into Iran in a sudden attack as the Royal Horde of Scythians. According to Herodotus they were pursuing the Cimmerians whom they had first driven from the Pontic steppe. The Cimmerians were the first specialized horse-nomads to make their name in history. They appear to have crossed the Caucasus by the pass of Darial in the centre of the range, and are mentioned in Assyrian sources of the late eighth century as formidable enemies of the kingdom of Urartu in Armenia, the northern rival of Assyria, and as a likely threat to the Assyrians themselves. They were fighting the Assyrians by 680, were beaten off and made their way westward, doing much damage, to the northwest of Asia Minor near Sinope, from which they destroyed the Phrygian kingdom, overran Lydia, and sacked the Greek cities of the coast. Meanwhile the Scythians, who probably did not pursue the Cimmerians at once southward, passed the Caucasus by the Caspian Gates, and moved through Transcaucasia, as the Cimmerians had done, but farther east, so as to occupy the country of the Mannaeans round Lake Urumia, which had been Assyrian territory. The Assyrians under Esarhaddon made an alliance with the Scythians against the Cimmerians and also no doubt encouraged them to attack Urartu.

²⁷ See Jettmar 1952, pp. 236-37.

²⁸ See McGovern 1939, pp. 100-101.

²⁹ Heine-Geldern 1951.

³⁰ Gallus and Horvath 1939.

³¹ Iliad XII, 5.

The Scythians under their king Partatua, the Protohyes of Herodotus, continued to increase their power in northwest Iran. Under his son, called Madyes by Herodotus, they made themselves overlords of the Near East for a period of twenty-eight years. They crossed Armenia, where Urartu about this time disappears from history, and conquered Asia Minor as far as the Halys, defeating and destroying the Cimmerians about 635. In the east the Median power under Cyaxares had been about to destroy Nineveh in 626, where the Scythians raised the siege and defeated the Medes so heavily that these became their vassals. The Medes were not yet rulers of western Asia, as Herodotus thought, but only a kingdom during the Scythian domination. The Scythians then, taking advantage of the weakness of Assyria, overran its provinces in Syria and Palestine as far as the Egyptian border. This advance was seen by the prophets Sophoniah and Jeremiah as a divine punishment impending upon the Jews, but the Scythians did not attack Judea. About 615 Madyes seem to have died. The Scythian power, which had never been an organized state, but only a plundering horde, was broken by Cyaxares, who soon after attacked Nineveh again with the Babylonians and took it. So ended the Scythian rule in western Asia, sped on its way perhaps by the plague which Herodotus records as attacking the horde in Syria. The main body returned over the Caucasus to south Russia, where their dominion lasted until the third century B.C. A remnant was settled by the Medes in the Nisaeen valley in Luristan, to supply cavalry for the Median armies.²²

The treasure of Sakkez, reassembled and described by R. Ghirshman,²³ is by him supposed to consist of gifts made to Partatua by the Assyrians while the Scythians were living in this part of northwest Iran. It includes objects showing the Scythian, Mannaeen, and Assyrian styles, all perhaps executed to please Scythian tastes by Assyrian craftsmen. The name Sakkez itself preserves their name, or at any rate the Persian term Saka, which was used for all northern nomads of their kind; Greek writers refer to the area as Scythene or Sacasene. Western Asia was not to be ruled again by a horde

of northern nomads until the days of the Turkish conquest.

The Scythians, once back on the Pontic steppe, ruled it as overlords of other nomads and of agricultural peoples, and as protectors of the Greek cities of the northern Pontic coastline between the Danube and the sea of Azov. Their power was not closely centralized, like that of the Hsiung Nu or the Mongols who had China as a model, for they were not in close contact with the Achaemenid empire of Persia, the model of such an organization, in western Asia. Indeed no individual chief's name is renowned in history. But they ruled the Pontic steppe and overran Danubian Europe also. The expedition of Darius against them early in the fifth century is not likely to have been an attempt at conquest, as Herodotus believed; it was probably a demonstration in force against a people who might attack him from the north in his intended invasion of Greece, and also perhaps a warning against any attempt to repeat the original invasion of western Asia.

The life of the Scythians depicted by Greek artists on vases found in south Russia²⁴ is fully described in the fourth book of Herodotus, to which the medical essay *Airs Waters Places*, attributed to Hippocrates, adds physical details. These descriptions are too long to repeat here, but it may be said that the life of mounted nomads with horses, cattle, great felt-covered waggons and yurts is portrayed in such detail there as is not known again in western literature until the accounts of the Tartars by Carpini, Rubruquis and Marco Polo. Herodotus' description of the burial of chieftains in great barrows supported by a wooden frame under the earth, while horses, slaves and dependants were slaughtered, is confirmed by the results of archaeology that may be found set forth in the great works of Minns and Rostovtzeff. The Scythians of south Russia rode the small horse of the steppe, and fought with the composite bow, used with arrows which had a distinctive trilobar head; the arrow heads have been found in graves and also sticking into the walls of ancient fortresses in Armenia and Transcaucasia, the ancient Urartu.²⁵ They also carried a short sword, the *akinares*, and javelins; like

tory very fully.

²² For the narrative of these events I have used Piotrowicz 1929, but a more accessible account is in the *Cambridge Ancient History* Vol. III Ch. V (pp. 113-131) and ch. IX sect. 1 (pp. 187-90).

²³ See Ghirshman 1950 who also discusses this piece of his-

²⁴ For the vases and other Greek objects see Minns 1913 passim.

²⁵ See Hančar 1950 p. 71, quoting the work of B. E. Piotrovskiy on Urartu.

other horse-nomads they had saddles which were unknown in the west, but apparently not yet stirrups. Their great supplies of gold are likely to have come from Siberia, probably from the Altai, which has always been a source of gold.³⁶ They exchanged the corn of their farming subjects for Greek products and must have had something to exchange for the Siberian gold, which they could not command as tribute. Their religious practices included the inhaling of fumes from hemp-seed burned on red hot stones, which put them into a state of supernatural vision, like the shamans of Turkish peoples. This is Meuli's³⁷ certain interpretation of Herodotus' description of a custom which the historian himself did not understand.

Further east the Ananyino culture, on the border of forest and steppe west of the Urals, occupied a region which was reached by Greek traders from Olbia on the Pontic coast by a route leading up the Don and Volga and through forest at its northern end. Objects found there show a faint reflection of the strong Greek influence further south. This culture was also in contact with the Caucasus and with the far north. It appears to have been an outpost of agricultural life dominated at this time by nomads and set among the primitive hunters of the Uralian forests, probably Finnish with the Mongoloid admixture reported by Debetz.³⁸

In the Minussinsk region, also on the border between forest and steppe, the Andronovo and Karasuk tradition of mixed economy continues with metal work in bronze and alluvial gold, and in iron when this comes to be introduced. The local version of the Animal Style is inferior to that of south Russia and other regions. Minns³⁹ attributes this form of "underdog Scythic" to settled metal workers of servile status. The people of the forest north of the Minussinsk basin were Mongoloids of the northern and robust type with large faces, different from the settled population. In this, the Tagar phase, bronze for tools and weapons was being replaced by iron.

In the Altai remarkable discoveries have shown a culture not unlike that of the Scythians of south Russia, except for the natural absence of Greek in-

fluence. The Maiemir culture of the Bronze Age is that of the first mounted nomads of this area, whose chiefs are buried with their war horses and with the weapons and trappings of mounted warfare, here of an archaic type like the accompanying version of the Animal Style. Later, from perhaps 500 B.C. onward, the Pazyryk kurgans are most elaborately appointed. Our exceptional knowledge of these is due to the cold of the high Altai, assisted by the permanent freezing of the ground under the layers of stone on the tombs though the surrounding ground is not permanently frozen. The six Pazyryk tombs and certain others in the same valley have been exhaustively described by Rudenko.⁴⁰

In the second tomb, the most celebrated, the contents were specially well preserved by water, which poured in when it was broken open by robbers and then froze for the succeeding centuries. In a special chamber were the corpses of seven horses which had decayed considerably when they were frozen finally; a rhomboid cut on their foreheads showed that each had been killed with a blow from a battleaxe. Saddles of leather cushions were stiffened with wooden bows before and behind; rugs for use with them were decorated with leather appliqué designs in the Animal Style. In the human chamber, consisting of wooden beams, the floor and walls were covered with black felt. It contained meat-ables, wooden vessels, remains of food for the dead, musical instruments, a drum and the remains of a lute, incense-burners with the remains of hemp seed, and a huge hollow tree 4.2 m. long which was the Sarcophagus for the two human bodies. By the coffin were a leather case, a leather bottle, a leather bag containing coriander seed and a mirror, an iron fork, a hide purse, a diadem of wood and leather adorned with a procession of cocks, a wooden stag in Animal Style covered with gold leaf, two other stags of wood and leather, two griffins of these materials with huge combs; and, still in the coffin, a carved griffin carrying the head of a stag in its open mouth. The bodies of the chief and his wife were found on the floor much mutilated by the robbers. A coat of squirrel fur and several

³⁶ I have treated this subject in an article: "The Legend of Aristaeas: Fact and Fancy in Early Greek Notions of East Russia, Siberia, and Inner Asia," *ArtAsiae* 17, 2 (1955) 161-177.

³⁷ Meuli 1935 pp. 120-27.

³⁸ See for instance Minns 1913 pp. 257-58, Borovka 1929 pp. 79-81, Rostovtzeff 1922 p. 64, Vernadsky 1943 pp. 47-48, Childe 1954 p. 20.

³⁹ Minns 1942 p. 63.

⁴⁰ See Jettmar 1951 pp. 172 etc. particularly pp. 174-184. Rudenko has now published his complete account. *Kultura Naseleniya Gornogo Altaya v Skifskoye Vremya*. (*The Culture of the Population of the High Altai in the Scythian Period*) Moscow 1953.

pairs of women's boots were near them. The chief was a man of Mongoloid physique, very strongly built, with wide cheek-bones: two oval holes in his skull suggest that he was killed in battle; his skin is tattooed in Animal Style, and his scalp, taken off in battle, is replaced by a false scalp sewn down with horse hair; he also wears a false beard, which hints that his subjects were white and required a beard in their chief even if he could not grow it. His wife is a tall handsome woman of completely European type, rather dark-haired, and in good health except for alveolar pyorrhoëa; she may have been poisoned to accompany him. This is perhaps the earliest known example of a Mongoloid chief of mounted nomads, and shows the beginning of a new racial mixture in this region, between the original white inhabitants and northern Mongoloids from the *taiga*.

Russian work on the Anyanyino culture has made it likely that a belt of agricultural territory extended from the forested steppe by the Urals eastward to Minussinsk, thus corresponding in Siberia to the area of the Pontic steppe that was anciently cultivated, and was equally on loess soil. This was inhabited by a group of peoples who used similar weapons, had similar beliefs, and were engaged in a common struggle against the Scytho-Sarmatian peoples who pressed upon them from the drier steppe to the south. They apparently continued the non-nomadic Andronovo tradition, and they may have differed in language from their enemies.⁴¹

Another region of contact between nomads and cultivators during this period was Chorasmia, south of the Aral Sea, where Tolstov carried out his well known excavations with a large team of experts.⁴² This has usually been reckoned Saka territory, and its inhabitants the ancient Massagetae have usually been called Iranians.⁴³ Tolstov on the other hand regards the Massagetae as another eastern group of Thracians like the Thyssagetae and Geloni of the Urals; he also identifies them with the Yue-Chi of Chinese annals, who for him are not nomads displaced westward by the Hsiung-Nu from Kansu, but a people long settled in the district and not even nomadic, though they traded with nomads and had nomad peoples as allies. According to him the Massagetic core of the Chorasmian confederacy consist-

ed of farmers and stockbreeders of this originally Thracian stock, who were ruled by a family claiming descent from Siyavush, the divine horseman, identified with the Thracian Sabazios.⁴⁴ These were the builders of the remarkable fortified villages of this region, which had walls facing inward onto a large enclosure and of such a thickness that houses and stalls for animals were built into them. There is not space to discuss Tolstov's views of matriarchal institutions among the Chorasmians, and indeed among many nomad peoples, a feature constantly magnified by Marxist prehistorians, who see in patriarchy the origin of private accumulation. But it is of interest that he claims to have shown that there was an ancient settled civilization in Chorasmia, older in fact than the Achaemenid Empire, and that though it was for a time a Persian province, it was never ruled by Alexander the Great or his successors.

Tolstov claims that it was this settled kingdom with its Saka auxiliaries that destroyed the Greek power of Bactria about 130 B.C., and that the same population formed the basis of the Kushan Empire which ruled central Asia and northern India later from the first until the third century A.D., though Chorasmia was not its central province.⁴⁵ He also argues with more force that the heavy cavalry of the Parthians and Sarmatians was invented in Chorasmia, though few will agree that the Sarmatian advance into south Russia from Kazakhstan was the result of a deliberate policy of the Chorasmian state. The new form of cavalry, however, consisting of mailed riders armed with lances and heavy swords, as well as bows and arrows, was a decisive arm in the battles of the Parthians when they founded their empire in Iran and Mesopotamia during the last two centuries B.C. It was this also which then gave the Sarmatians the power to destroy the Scythian dominion on the Pontic steppe and overrun Danubian Europe.⁴⁶ The Sarmatian advance into south Russia began slowly about the time of Alexander's conquests at the end of the fourth century B.C., after the westernmost tribes of this group had lived for some centuries as neighbours of the Scythians on the left bank of the Don. It appears that the Yue-Chi movement of the second century B.C. pressed on some of the easternmost

⁴¹ So Professor Jettmar says in a private letter to me.

⁴² For a full account see Ghirshman 1953.

⁴³ For a summary of the usual view of the Yue-Chi see Tarn 1938 ch. VII "The Nomad Conquest of Bactria" (pp. 270-311).

⁴⁴ Ghirshman 1953 I 218-19, 235-36.

⁴⁵ Ghirshman 1953 II 297-305.

⁴⁶ Ghirshman 1953 II 211, 293-97.

tribes between China and Central Asia, so that a stronger and more widespread penetration of the Russian steppe soon followed. The Scythians were driven out into the Crimea and the Dobrudja, where the Romans knew them, and their territory was occupied by this new Iranian wave, which passed on into eastern Europe and came into contact with German tribes as well as with Thracian and Celtic. The Sarmatians have had no Herodotus so that much less is known of them than of the Scythians and they did not for long form a unified power. But their share, particularly that of the Alans, in the destruction of the Roman Empire was second only to that of the Germans and the Huns, and with the Germans they contributed much to the origins of later Europe, though they lost their language, like the greatest wanderers among the German tribes, such as the Goths.⁴⁷ Their remains are less elaborate than those of the Scythians, but they had their own version of the Animal Style influenced from the south and using brighter colours. The fine gold plaques from Siberia placed in the Hermitage Museum at Leningrad by Peter the Great, are the best known examples of their work.⁴⁸ They were perhaps the inventors of stirrups, a necessity for heavy cavalry with lances.⁴⁹

The concluding phase in the whole history of the steppe to be treated in this survey consists of the further adventures of the Hsiung Nu. The Chinese under various dynasties from the Shang onwards were in conflict with northern peoples who lived beyond the cultivated region but constantly raided it. These people were for many centuries nomad shepherds and cowherds who did not ride the horse, though in Kazakhstan, Zungaria, and Kashgaria to the west of them some of the north Iranian people had long been mounted nomads. To the far north and east of them the Tungusian group of Mongoloids which later became nomadic was still one of hunters, but their eastern neighbours were similar peoples to themselves.

The ruler of the small Chinese state of Sao near the Mongolian frontier made a name for himself about 300 B.C. by his victories over the northern barbarians. He won these by making his soldiers fight as cavalry in boots and trousers, after which

the Chinese began to abandon the war chariot. The barbarians must by this time have learned from the Iranian people further west to be skilled horsemen, though they must have known some form of bow and arrow for centuries. By the end of the third century B.C. the barbarians formerly called Hun-Yü or Hien-Yün had been gathered into the well-known confederacy of the Hsiung-Nu under Touman, the founder of the Hsiung-Nu empire. During the same period Shi-Hwang-Ti had made China into one empire and built the Great Wall by combining earlier lines of defence in different regions, and after him Liu Pang had founded the Han dynasty, which lasted from 202 B.C. to A.D. 220. Throughout these centuries the Shanyu of the Hsiung-Nu and the Hwang-Ti or emperor of China were rival great powers in eastern Asia, continually at grips in Mongolia and north China, and contending for the domination of the small Iranian states of Kashgaria south of the Tien-Shan.⁵⁰

The Hsiung-Nu reached their greatest power under Maodun, son of Touman, who reigned from 209 to 174 B.C. After him the empire remained stable for a few generations, and then disintegrated into northern and southern portions, which were used against one another by the Chinese, and were also attacked from time to time by nomads from further east, the Wu Huan and Sien-Pi, who had escaped the domination of Maodun. Maodun was often at war with the Indo-European Yue-Chi and other peoples in eastern Kashgaria and the Wu-Sun in Zungaria. His successor Gi-Yu, no more successful in permanently defeating the Chinese, turned westward and destroyed the Yue-Chi kingdom. A small detachment, the little Yue-Chi, took refuge on the edge of Tibet among the Nan-Shan mountains, but the main body, the Great Yue-Chi, fled northwest to Zungaria to settle by the Ili river. They drove out the Sakas. These in turn invaded Sogdiana, the northern part of the Greek kingdom of Bactria, attacked Parthia, and when they were repulsed, passed on into northwestern India, where again they were in conflict with the Indian portion of the Bactrian Greek kingdom. The Yue-Chi were next driven out of Zungaria by the Wu Sun with help from the Hsiung-Nu. The Wu Sun remained

⁴⁷ On the Sarmatians generally, see Rostovtzeff, 1922, ch. VI "The Sarmatians," Vernadsky 1943, ch. IV "The Sarmato-Gothic Epoch, 200 B.C.-A.D. 370," Vernadsky 1951, with its large bibliography; also Harmatta 1950, for an account of their empire ca. 125-60 B.C. on the Pontic steppe.

⁴⁸ See Borovka 1929 pp. 69-73 and Rostovtzeff 1929 ch. II "The Animal Style in South Russia: the Sarmatian Period."

⁴⁹ See Vernadsky 1943 pp. 52 and 180.

⁵⁰ See McGovern 1939 ch. V "The Rise of the Hunnish Empire."

in Zungaria for generations, but the Yue-Chi, still fleeing from the Hsiung-Nu, turned south and destroyed the Greek kingdom of Bactria about 130 B.C. They remained in this region for centuries and gradually ceased to be nomads. Sometime before A.D. 40 Kujula Kadphises, of the Kushan tribe among their Iranian rulers, formed them into the powerful Kushan empire, in Bactria and northern India. The Yue-Chi horde seems to have consisted of Iranian rulers with subject Tocharian tribes. Kushan inscriptions are in an east Iranian dialect, but the west Indo-European language of the Tocharians is known from writings of the eighth century A.D. discovered in Kashgaria and attributed to settled descendants of the Little Yue-Chi.⁸¹

The Hsiung-Nu, having caused this great displacement of Indo-European nomads westward, continued for some centuries with varying fortunes as rulers of Mongolia and rivals of China. On the Yenisei, this is the time when the Tagar period ends and the Tashtyk period begins, with a stronger Mongoloid element among the skeletal remains, and portrait masks of the dead, which show various mixtures of Mongoloid and white types. The result of this crossing was the later Kirghiz. The immigrants may either have been part of the Hsiung-Nu confederacy, since they are buried in rich chieftains' kurgans, or they may have been Mongoloid nomads, like the Hsiung-Nu, but wishing to escape from their power.⁸²

In the end the Hsiung-Nu power was worn down by the combined efforts of the Chinese and of another nomad confederacy further east, the Sien-Pi, whose ruler Tanshihuai founded a new empire in Mongolia about A.D. 150. This however fell into temporary weakness on his death, or the Sien Pi might have conquered China as the Han declined. The Hsiung-Nu were divided more and more by Chinese diplomacy into a northern and a southern group. The southern group was eventually incorporated in the Chinese state under the Tsin dynasty, but by rebellion it set up its own line of local emperors in North China for a period in the fourth century A.D.⁸³ The northern Hsiung-Nu on the other hand made history by moving westward.

Under the first pressure of the Sien-Pi the Hsiung-Nu had moved from Mongolia to eastern Zungaria, but before his death Tanshihuai occupied Zungaria also, and destroyed the Hsiung-Nu empire in the east for ever. Its rulers made their way westward as a disorganized group of clans without central government, and apparently began to mix freely with the Alanic group of Sarmatians and with Finno-Ugrian tribes of southern Siberia. For two hundred years between A.D. 170 and A.D. 370 nothing is reported either by Chinese or by western historians of the descendants of the Hsiung-Nu in Kazakhstan. At the end of that period they appear as the White Huns or Ephthalites who invaded Persia and India and as the Black Huns who invaded south Russia and the Roman Empire. Their remains of this date have been provisionally identified by Bernštam near Lakes Isayk-Kul and Balkash in finds of bows, armour and cauldrons, and of skulls with a characteristic ring-shaped deformation.⁸⁴

Meanwhile in the south the great Kushan empire, which had been the rival of the Parthian power, had broken up during the third century, after ruling a large part of northern India and transmitting Buddhism to China by way of Sogdiana and Kashgaria. Its dominions in India were gradually taken over by the native Gupta empire, while in south Kazakhstan and Bactria the Sassanids put an end to it as an independent power.

From eastern Kazakhstan the new Hunnish power began in the fourth century to press southward and westward. Southward the Chionites, later known as the Ephthalites or White Huns, pressed upon the Sassanids in Iran and eventually established an empire in the same region that had been held by the Kushans, including India. Their power in central Asia was eventually destroyed by joint action of the Sassanids and the Turks, successors of the Avars, in the middle of the sixth century, while in India a national rising destroyed their rule a little earlier.⁸⁵ Their appearance was evidently less Mongoloid than that of the other Huns, but it is known that their language was not different.⁸⁶

⁸¹ See Tarn 1938 ch. VII "The Nomad Conquest of Bactria."

⁸² See Ghirshman 1951 pp. 180-82; Jettmar 1952 pp. 172-73. Jettmar *ibid.* 208 remarks on Turkish names in the Volga region as early as the first century A.D. and the difference between Chuvash and other Turkish languages of later arrival. It is possible that some Turkish tribes or clans reached the Volga among the Sarmatian peoples.

⁸³ For the details of this long struggle, see McGovern 1939 chs. VII-XV.

⁸⁴ See Jettmar 1952 pp. 173-78, McGovern 1939 pp. 364-66.

⁸⁵ See McGovern 1939 ch. XVIII "The Huns in Persia and India."

⁸⁶ See F. Althcim and O. Hansen in Althcim 1951 "Das Volkstum der Hephthaliten," pp. 104-16.

The career of the Black Huns was shorter, but more famous and much more important for the history of the Steppe. Their confederacy under Balamber attacked the kingdom of the Alans across the Volga about 350, and by 374 had destroyed it, adding the Alans to their subject peoples. Some of the Alans took refuge in the Caucasus, where their descendants survive as the Ossetians, the only remnant of the north Iranians of the Steppe. The augmented horde next crossed the Don to destroy the eastern Gothic kingdom and then the Dniester to destroy the western. The latter history of the Huns under Attila as invaders of the Roman Empire and rulers of eastern Europe cannot be followed here.

But their invasion of south Russia put an end

to the Indo-European nomads on the steppe, except in so far as these survived, without their language, as an element in the ancestry of the continuing flood of Turkish-speaking peoples that overran central Asia, Kazakhstan, south Siberia and south Russia in succeeding centuries. The north Iranian nomads had taught their technique of living and fighting only too well to their eastern neighbours, who by greater toughness and by superior cohesion and political skill, perhaps due to their struggles with the Chinese, drove them off the steppe to merge eventually with their more civilized kindred in the making of modern Europe.

THE QUEEN'S UNIVERSITY

BELFAST, NORTHERN IRELAND

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News Letter from Greece

EUGENE VANDERPOOL

PLATES 83-86

The year has been one of widespread activity, and a number of noteworthy discoveries have been made. Excavations at two prehistoric sites in Thessaly have revealed the presence of habitation layers belonging to a pre-pottery stage of civilization. At Aulis the long sought temple of Artemis which stood on the spot where the Greeks sacrificed before setting sail for Troy was discovered. At the Kabeirion near Thebes a spacious theatre was found in front of the temple. At Isthmia the classical stadium, with a remarkable starting mechanism at one end, was partly uncovered, and the temple of Palaimon was located. At Pylos Nestor's palace was completely uncovered; a chamber tomb in the district produced two beautiful daggers with inlay decoration, some seal stones and other precious objects. Three rooms of the Acropolis Museum and two more galleries of the National Museum were opened to the public, the Stoa of Attalos was dedicated as the museum of the Athenian Agora, and early in 1957 the Archaeological Society dedicated its handsome new building.

ATHENS AND ATTICA

The ACROPOLIS MUSEUM opened its doors to the public for the first time since the war. In one large gallery the Parthenon frieze, the Nike Parapet and some fragments of the Erechtheion frieze are exhibited. Two small galleries contain a selection of classical marbles, and one small gallery a few archaic pieces. The bulk of the archaic sculpture is not yet on exhibit.

Work in the NATIONAL MUSEUM has continued steadily and two new galleries were opened, one containing votive reliefs, the other black figured pottery. In the latter gallery the remarkable terracotta funeral wagon found at Vari in Attica in 1936 is exhibited for the first time (pl. 84, fig. 9). The bier is carried on a low flat four-wheeled wagon. It is covered by a large embroidered cloth which hangs down around its legs. On this cloth lies the body, covered by a smaller cloth. On top lie a small running figure and a bird representing

the departure of the soul. Mourning women stand around the bier. The date is about 600 B.C.

Mr. Meliades continued the excavation of the SOUTH SLOPE OF THE ACROPOLIS in the area in front of the Odeion of Herodes. A retaining wall 14 meters south of the Odeion and parallel to it formed a level area in front of the building and allowed approaches from the east and west. South of the retaining wall the ground dropped steeply and the area was occupied by private houses. Owing to repeated rebuildings these houses are not well preserved, but walls as early as the fourth century B.C. were found. By means of pottery finds, the occupation of the area can be traced back to the Mycenaean period. Ten Geometric graves were found which yielded a number of whole vases. Many wells were excavated and they yielded quantities of pottery. In one of them there were found three terracotta statues (pl. 83, fig. 1) and part of a fourth. The statues are about half life size. Two of them are Nikai from the akroteria of some small building. They date from the middle of the fifth century B.C. and were made in the same mould. The other statues are Hellenistic.

South of the Monument of Lysikrates a section of the STREET OF TRIPODS was discovered. The street itself is about six meters wide. On its west side is the stepped base of a large choregic monument. On its east side is another monument, this time long and narrow, which probably also supported tripods; below this monument are remains of house walls of the archaic period.

North of the OLYMPIEION, where some work was being done to improve the landscaping, a deep wide trench was partly cleared. In it were some large unfinished poros column drums belonging to the Peisistratid Olympieion. The deep trench in which they lie may be the moat of the city wall, and if so the Olympieion was included within the city from at least the fourth century B.C. if not from the time of Themistokles.

Between Aristeides St. and Klauthmonos Square more work was done along the stretch of CITY WALL that had been partly cleared before the war

(*AA* [1940] 165-66). A section of the wall was cleared and parts of several houses of late antiquity were uncovered inside it. The houses were separated from the wall by an open space about two meters wide. Built into a wall of one of the houses was an unfinished marble statue about half life size of Diomedes carrying off the Palladion; the upper parts are fairly well finished, but Diomedes' legs and the base of the Palladion on which he rests his left knee as he lifts the statue are only roughly blocked out (pl. 83, fig. 2).

The German School has resumed work on a small scale at the KERAMEIKOS, and large scale work is planned soon. The area has been thoroughly cleaned and some of the deeper pits have been refilled. Excavations have been in progress in the Street of Tombs checking the stratification and studying the water channels that run deep underneath it. Large scale work is planned in the area in front of the Dipylon Gate on the road leading to the Academy as soon as negotiations for acquiring the property are completed.

On the OUTSKIRTS OF ATHENS about a quarter of a mile west of the Academy of Plato where the deep beds of clay are being exploited some late Geometric graves have been discovered and excavated. At a lower level than the graves an apsidal house of early Helladic date has been found (pl. 84, fig. 6). Its dimensions are 8.50 m. x 4.50 m. and it consists of two rooms and a porch. The foundations are well built of rounded river stones.

At ELEUSIS Mr. Travlos did some further work in the area west of the Greater Propylaea and determined that the sanctuary did not end at the building which he identifies as the Prytaneion but continued westward occupying the whole area between the city walls and the acropolis. Mr. Mylonas completed his excavation of the cemetery, clearing 86 more graves of various periods. The pottery found in an early Geometric cremation burial is illustrated on plate 84, fig. 8.

Mr. Papadimitriou resumed work at BRAURON after an interval of six years. Exploring the cleft in the rock back of the small shrine southeast of the temple of Artemis, he came upon the walls of a small structure. Work was impeded by large rocks fallen from above so that the excavation could not be completed this season. Mr. Papadimitriou believes, however, that this cave-like cleft was probably the place shown in antiquity as the grave

of Iphigeneia, and hence one of the most sacred spots at Brauron. The acropolis above the classical sanctuary was inhabited in prehistoric times. Exploratory trenches on the slopes revealed the presence of several heavy circuit walls forming terraces for the houses of the town. On top of the acropolis part of a large building was cleared. These remains all appear to date from Middle Helladic times and from the earlier phases of Late Helladic. The later phases of Late Helladic are missing, suggesting that the acropolis was abandoned at an early date. On the slopes of a hill east of the acropolis six Late Helladic chamber tombs were excavated. With its prehistoric acropolis, its classical sanctuary and its well preserved Early Christian basilica, Brauron is developing into one of the most interesting archaeological sites in Attica.

A few miles north of Brauron Mr. Papadimitriou cleared the temple of ARTEMIS TAUROPOLOU which legend says was founded by Orestes. It lies just back of the coastal sand dunes between Loutsa and the salt lagoon, near the site of the ancient deme of Halai Araphenides. The krepis, consisting of well cut poros blocks and measuring 21 by 14 meters on the lowest step, was exposed.

The excavations on Mrs. Rosolymou's estate at DRAPHI, described in last year's *News Letter*, were continued. The clearing of the fourth century house was completed. It consists of an anteroom with paved floor which communicates with the main room of the house, a large chamber 6.30 m. x 4.00 m. In the center of the main room is an oval hearth enclosed by a low wall, and beside the hearth to the west is a pithos sunk in the ground probably for storing water for use at the hearth. In the back part of the house, which lies at a slightly higher level owing to the slope of the ground, are several smaller rooms. One of these was apparently the bath, for its floor is paved with a sort of mosaic of tile fragments and a stuccoed basin is located at one side of the room. The houses adjoining the house just described were not investigated further, but another group of houses some 500 m. farther north was partially cleared. In the cemetery more cremation burials, chiefly of the second half of the fifth century B.C. were opened. In one of them there was a well preserved bronze kalpis containing the ashes of the deceased wrapped in a cloth; the cloth was in poor condition. A grave of the early sixth century B.C. contained an oinochoe of Polos style.

PELOPONNESOS

Mr. Broneer continued his work at ISTHIA. The triangular pavement with grooves found in the fall of 1955 (*AIA* 60 [1956] 269-70) proved to be an elaborate starting line used in connection with an early stadium. A full explanation is given in *Archaeology* 9 (1956) 268-272. The same article gives some details of the sanctuary of Palaion which was located in the 1956 campaign. A remarkable perirrhanterion or water basin of bluish marble dating from the seventh century B.C. was found in fragments. A very large open basin with wishbone handles is supported by four korai who stand on recumbent lions and hold a tail and a leash in either hand.

Just north of the west end of the CORINTH CANAL army engineers came by chance on a paved ancient road and subsequently cleared a considerable stretch of it (pl. 83, fig. 3). It is evidently the *diolkos* by means of which ships on wheeled cradles were dragged across the Isthmus.

The outward aspect of MYCENAE has changed considerably as a result of the conservation work of the last few years. The great bastion to the right as one enters the Lion Gate has been cleared and some fallen blocks have been replaced so that the form of the bastion in its two main periods, Mycenaean and Hellenistic, is now clear. The southeast corner of the megaron of the palace has been restored up to the level of the floor so that the shape and size of the room are now evident at a glance; conservation work has also been done in other parts of the palace.

Mr. Caskey conducted another full campaign at LERNA probing deeply into the Neolithic layers at the south edge of the mound. His most striking discovery, a Neolithic terracotta figurine of a standing woman, has been published in *Hesperia* 25 (1956) 175-177.

In SPARTA the work of re-installing the Museum has proceeded. The sculpture galleries, which contain among other things the famous "Leonidas" statue, are now open to the public. The galleries with the small finds are being prepared. Many of the ivories and other precious small objects from Sparta have been placed on exhibit in the National Museum in Athens.

About 700 meters south of AMYKLAI, Laconia, near the church of St. Paraskeve, a rich votive deposit was discovered by chance and partly ex-

cavated by Mr. Chrestou. It contained thousands of vases, terracottas and metal objects dating from geometric through Hellenistic times, the seventh and sixth centuries B.C. being best represented. The most interesting objects were the terracotta relief plaques (pl. 84, fig. 5). These vary in size from about five centimeters square to about twenty-five. Various subjects are represented, but the most common types recall the well known Laconian "hero" reliefs in marble, with a seated figure usually holding a kantharos, another figure standing in front, and a serpent rising from the ground. Other types show warriors, horsemen, amphorae and the like.

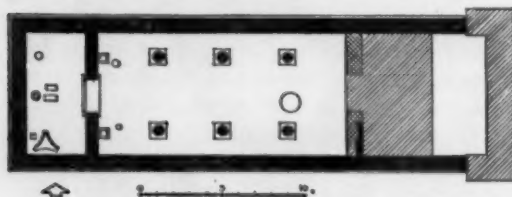
The German School continued excavating in OLYMPIA, probing deeply in the area of the workshop of Pheidias. Important new material from the workshop was found. A full report is promised soon. Some columns of the Palaistra have been re-erected and further restoration work is planned.

At PYLOS Mr. Blegen completed the clearance of the palace, uncovering a second, smaller megaron in the east corner. A report has appeared in the previous number of this *Journal*. Mr. Marinatos continued his search for tombs in a wide area around Pylos. His chief success was near Myrsinochori, about an hour and a half northeast of the palace, where he found a partially unrifled tholos tomb. In it were two daggers decorated with gold and silver inlay, the one having representations of nautilus, the other of felines; the handle of the latter is sheathed with gold. The tomb also contained a variety of other precious objects of gold, silver and ivory, numerous seal stones and some forty vases. Some of these objects are illustrated on plate 85, figs. 10-13. The latest vases in the tomb are no later than L.H. III, A:1.

NORTHERN GREECE AND ISLANDS

At AULIS Mr. Threpsiades discovered the famous and long sought temple of Artemis, where the Greeks sacrificed before setting out for Troy. It lies just west of the southern arm, now silted up, of the bay of Mikro Vathy. The temple is long and narrow (30 x 10.50 m.) without a peristyle, having a porch, a prodomos, a cella and an adyton (Ill. 1). In the cella are two rows of three Ionic columns. The outer walls consist of a socle of polygonal masonry and appear to date from the fifth century B.C. The interior was remodelled in Roman times. The identification is assured by the dis-

covery in the temple of a statue base of early Roman times with an inscription stating that Mnason and Atheno had set up a statue of their daughter Zopyrina who had served as priestess of Artemis.



ILL. 1. Aulis. Plan of Temple of Artemis

mis of Aulis. Several statues of draped female figures of Roman times, probably priestesses, were discovered and taken to the museum in Chalkis. A large base inside the temple may have held the remains of the wood of the plane tree, mentioned by Homer in the *Iliad*, which Pausanias saw in the temple.

At the Kabeirion near Thebes Miss Gerda Bruns, who has been working for many years on the final publication of the excavations made in the eighteenthies, returned to the site for some supplementary exploration. The site was completely overgrown and only a few blocks remained visible in a thick patch of brambles. Many blocks had been removed in the intervening years by the local inhabitants, so that the site was completely unrecognizable. Exploratory trenches re-exposed parts of the temple and added important new information to our knowledge of the sanctuary. East of the temple a large theatre was partially uncovered. It lies on the axis of the temple and is so placed that the temple occupies the position of the scene building. The theatre was thus evidently designed for the convenience of the worshipers at the Kabeiric festival. The arrangement recalls that at the sanctuary of Artemis Orthia in Sparta. The theatre is built of *opus incertum* faced with well cut blocks of poros and therefore dates from Roman times. A stoa was also discovered running southward from the temple for some fifty meters, showing that the sanctuary extended in this direction as well.

At THEBES the old museum has been demolished and work has started on the new building which is to be erected on the same site.

Mr. Threpsiades continued his work around the gates of the Mycenaean fortress of GLA in the Co-

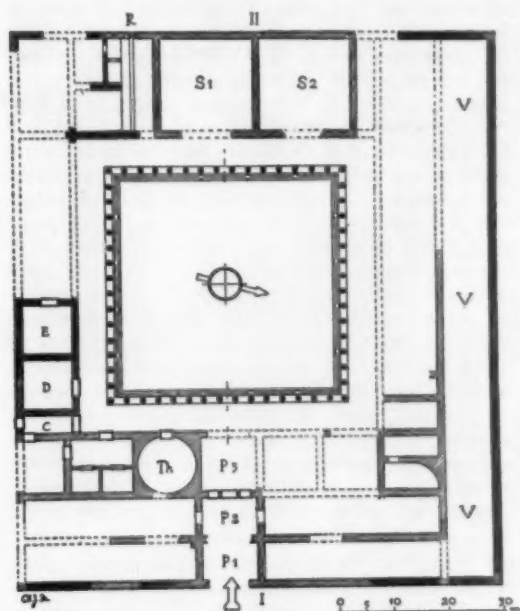
paic basin. Inside each gate is a small guard house. The pottery found in the course of clearing the gates is of L.H. III date.

Mr. Theocharis conducted a small trial excavation on the site of Iolkos, the hill crowned by a mediaeval fort in the northwestern part of the modern city of Volo. Most of the hill is still covered with houses so that the excavation was confined to a small area which had been partly opened up by Tsountas in 1901, and later by Arvanitopoulos. A study of the stratification yielded interesting results. The hill which is about 400 meters long and 270 meters wide, and whose height is about 11.50 meters from its top down to water level (2.50 m. below the present foot of the hill) is almost entirely made up of habitation debris. The lowest layers, just above water level, contained pottery and walls of houses of the Early Bronze Age. Above this four layers of Middle Bronze Age habitation were noted. The most important remains belong to Mycenaean times. Thick walls, large rooms and stuccoed floors show that we have to do with a palace. This palace was rebuilt several times and finally destroyed by fire. The layers overlying the ruins of the palace have remains of Protoegeometric and Geometric times. The Archaic and Classical periods are sparsely represented, showing that the site was then practically abandoned in favor of the neighboring Pagasai. The site of Iolkos is evidently a major one, but the difficulties of excavating it are formidable.

Mr. Milojcic continued his excavations at several prehistoric mounds in the Larissa area. At the GREMNOS (Argissa) mound on the banks of the Peneios 5 km. west of Larissa he discovered at the very bottom a habitation layer about one meter thick in which there was no pottery. We thus have to do with a pre-Sesklo culture, earlier than anything hitherto found in Thessaly, in which the use of pottery was unknown. Mr. Theocharis, in a small trial dig at SESKLO itself, established the existence of a corresponding layer there also. Mr. Milojcic has published preliminary reports of his 1954 and 1955 excavations in *AA* (1955) 157-231.

Mr. Makaronas reports on recent work at the palace of PALATITSA near Verria, Macedonia (Ill. 2). The peristyle court, a very large one measuring 44.80 m. and having 16 columns on each side, was completely cleared. Enough architectural fragments were found to permit a full restoration on paper and a sample reconstruction. A room about nine

meters square on the south side of the court (Room E) was cleared and its floor was found to be decorated with a mosaic of natural river pebbles. The mosaic is an elaborate one and is carefully executed



ILL. 2. Palatitsa. Plan of Palace

in pebbles of various colors. Plate 86, figs. 14-16 gives a restored drawing and two details. The room is the most elaborate yet found at Palatitsa and must have been one of the royal apartments.

From the peninsula of GIASE-ADA which runs out into a lagoon southwest of Komotini, Thrace, Mr. Bakalakis reports the discovery of the upper

part of a palmette crowned grave stele of the last quarter of the sixth century B.C. The deceased, a woman whose head only is preserved, is represented full front, not in the usual profile view (pl. 86, fig. 17). The peninsula is strewn with ancient blocks and fragments of pottery, and Mr. Bakalakis believes it to be the site of the ancient town of STRYME.

Among Mr. Evangelides' finds at DODONA we may note a small archaic bronze horse (pl. 84, fig. 7). A rider found in Carapanos' excavations some eighty years ago fits on its back and evidently belongs (*Dodone et ses ruines*, pl. xi, 3).

In SAMOTHRACE Mr. Lehmann undertook a partial restoration of the façade of the Hieron (New Temple) (pl. 83, fig. 4). Four façade columns with the architrave over the original central intercolumniation, and a fifth column on the eastern side of the porch were re-erected. The restoration adds greatly to the appearance of the site.

At Palauiopolis on the island of ANDROS, a site which has long been neglected, Mr. Kontoleon did some excavating with funds supplied by a group of local Andriots. Working in the small coastal plain at the bottom of the site he cleared a stoa about 50 meters in length and 15 in breadth. It appears that the Agora of the ancient town lay here, and this stoa formed its north side. In front of the stoa is a row of statue bases. The famous statue known as the Hermes of Andros was found in this area in 1832; it appears, therefore, that it once stood in the Agora and is not a grave monument as has generally been thought.

AMERICAN SCHOOL OF CLASSICAL STUDIES
ATHENS

N E C R O L O G Y

LOUIS ELEAZAR LORD, born in Ravenna, Ohio, July 14, 1875, died January 24, 1957, of a cerebral hemorrhage in the Peter Bent Brigham Hospital in Boston, after he had recovered from severe injuries in an automobile accident in Europe last summer, and soon after returning from the annual meeting of the Archaeological Institute in Philadelphia at the end of December. He was buried in Oberlin where the funeral service was held at 2:00 p.m., January 26th, at Fairchild Chapel, and burial took place in Westwood Cemetery. Dr. King, pastor of First Baptist Church, conducted the memorial service. He was president of the Archaeological Institute of America 1932-1937, when he was made President Emeritus. He obtained his A.B. and A.M. from Oberlin in 1897, A.M. from Harvard in 1900, Ph.D. from Yale in 1908. He received honorary degrees such as L.H.D., 1929, from Illinois College, Jacksonville, Illinois, and Litt.D. from College of Wooster, Ohio, 1940. He received the Oberlin College Alumni Medal of Honor in 1948. He studied at Berlin 1908-09. He became professor of Latin and Greek at Pritchett College, Glasgow, Wisconsin, 1898-99, instructor in Latin and Greek at Oberlin 1903, professor 1912-41, when he retired as professor emeritus. But a man with his tremendous energy was not to be inactive. He was visiting professor at the University of Illinois 1942-43, Martin Lecturer at Oberlin 1943. From 1944-49 he was professor of ancient history and classical literature at Scripps College in California. He became president of the Bureau of University Travel in 1949. He had worked out and led tours for it for many years. I once went with him as lecturer and leader. In 1923-24 he was annual professor of Latin at the American Academy in Rome. He directed the summer school of the Bureau in conjunction with the summer school of the American School of Classical Studies in Athens, 1922-25, 1931-50. He was its annual professor of Greek 1928-29, visiting professor 1936-37 (first semester). He was associate director of personnel of the American Red Cross in Athens 1918-19. He was a member of the Managing Committee of the School in Athens for 1926, chairman and member of Trustees 1939-50, a member of the Council of the Alumni Association 1941. He was on the commit-

tee for the excavation of the Agora sites 1939, and a trustee of Athens College.

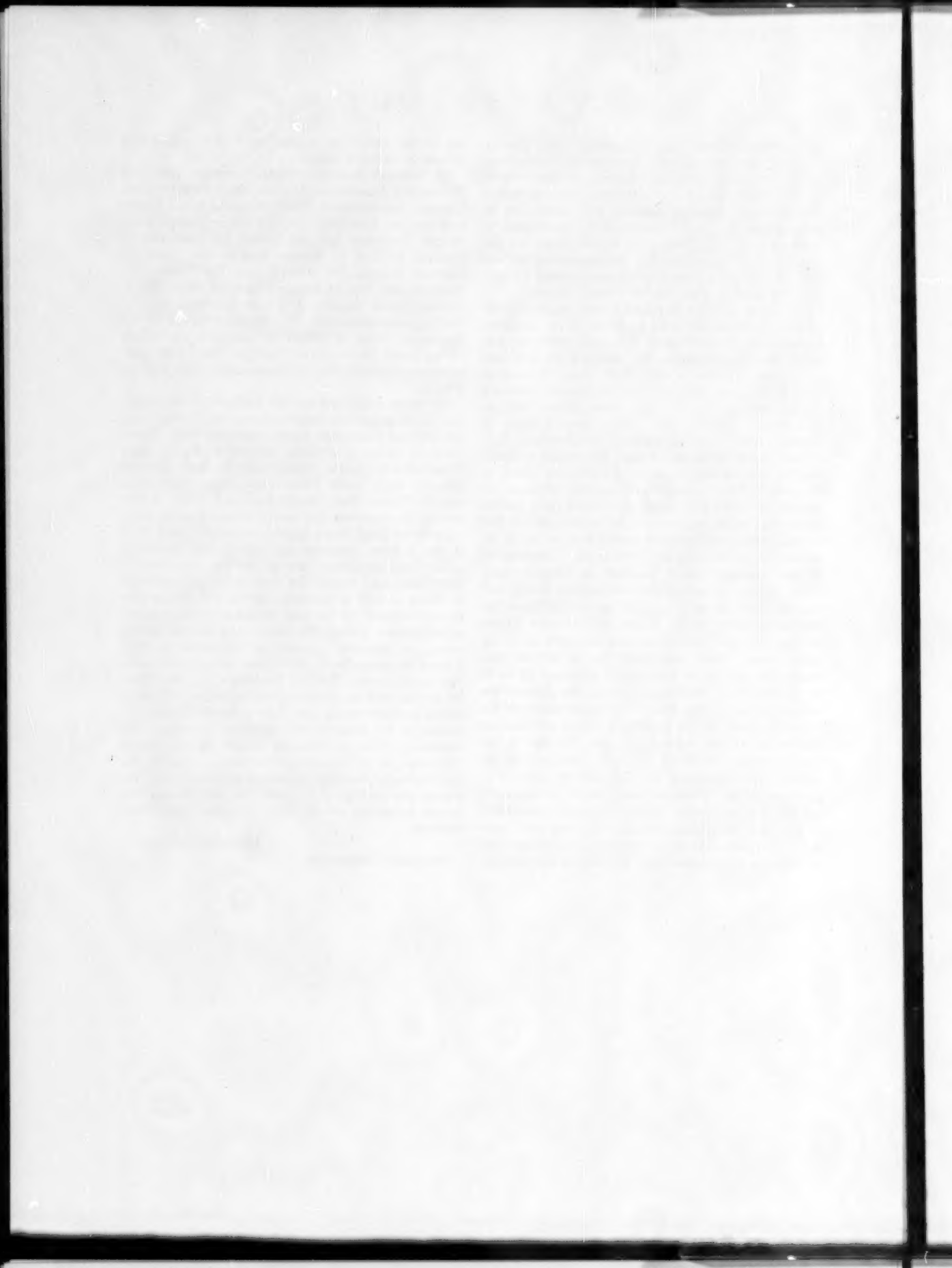
He belonged to many scientific societies, American Philological Association, English Classical Association, Classical Association of Middle West and South (Secretary 1915-20, President 1922-23), Ohio Classical Conference (President 1922-29), Society for Promotion of Hellenic Studies, of Roman Studies, the American Classical League, Phi Beta Kappa, Eta Sigma Phi. Since 1939 he was an honorary member of the Greek Archaeological Society. He was decorated by the Greek government with the Chevalier Order of the Redeemer, Order of Officer of George I, and officer of the Royal Order of the Phoenix. The Italian government also made him a Commendatore della Corona d'Italia.

He wrote many articles. His books were *Aristophanes*, in the series *Our Debt to Greece and Rome*, 1925; *The Roman Historians*, 1927; *Anacreon*, 1928; *Translation of Orfeo of Politian*, *Aminta of Tasso*, 1931; *Translation of Cicero's Orations*, for the Loeb Classical Library, 1927; *Latin Third Year*, 1939; *Thucydides and the World War* (Martin Lectures), 1945; *A History of the American School of Classical Studies*, 1947.

Professor Lord was a kindly, cooperative, and loyal friend, a great inspiring and stimulating teacher, a scholar and gentleman, one of the few interested in both Latin and Greek (he was an annual professor in Rome as well as Athens). But he will always also be remembered for his rare business organizing and administrative ability. He was a magnificent money raiser, an inventive organizer of important projects. I know he was offered at least one college presidency. He was director of People's Banking Company, Oberlin 1926-40 and an excellent presiding officer. No other Greek professor could have done as much for the promotion of the financial and scholarly interests of the American School of Classical Studies in Athens (as Chairman of its Managing Committee), and for the Archaeological Institute (president as said above). We mourn the passing of a great man and extend our sincere sympathy to his wife, daughter, and three nephews.

DAVID M. ROBINSON

UNIVERSITY, MISSISSIPPI



BOOK REVIEWS

SOVIETSKAIA ARKHEOLOGIA, Vol. XX, edited by B. A. Rybakov. Pp. 424, figs. 162. The Institute of the History of Material Culture, Moscow, 1954. 22 Roubles, 70 Kopeks.

Sovetskaiia Arkheologia, which used to be the year-book of the main archaeological institute in Moscow, has now burgeoned out as a bi- or thrice yearly serial, reflecting both the increased activity in the Soviet archaeological world and an improvement in the former deplorable lag in publication of research. It is a pleasure to see work done the year before reported on in the 1954 number. Furthermore there has been a noticeable improvement in the standards of illustrations, though there is still a long way to go. The subject matter is as varied as are the interests of the archaeologists in so vast and historically rich a land, and this poses a rather delicate problem for the critical reader who is not equally versed in every branch of the subject.

For prehistorians, the gem of the issue is undoubtedly I. K. Sveshnikov's provocative contribution to the question of the origins of the neolithic Tripolye culture in the Ukraine, considered in relation to the *Stichbandkeramik* culture in the upper Dniester and western Volnhia regions. This ceramic complex and its associated lithic and bone remains is the immediate predecessor of the Tripolye culture in the area. It was first reported in the Polish archaeological literature in the early twenties. It was thought that the culture arose in the central Danube, whence under the influence of climatic changes it migrated to its ultimate home. Russian authors, notably Krichovski and Passek, have traced the origins of the Tripolye culture in the preceding *Bandkeramik* material, but have not determined its exact sources. Finds of late *Bandkeramik* in the early Tripolye sites of Luka Vrublevetskaia and Nezvisko have led Sveshnikov to conclude that *Bandkeramik* appears at a definitely earlier date than does the Tripolye type; that the pottery with angular ornament is synchronous with Passek's phase B/I of the Tripolye culture; that the Volnhia group of *Stich-Bandkeramik* is synchronous with B/I of Tripolye; *Bandkeramik* with painted ornament is synchronous with Tripolye B/II and C, as illustrated by finds from Gorodnitsa. The composition of the clays used, the linear ornament, the clay sculpture and the inventory of flint types as well as domestic architecture, combined with the community of territory occupied in the lower Ukraine, all attest to the interrelationship of the two cultures. The presence of late types of *Bandkeramik* with early Tripolye material in joint finds provides chronological evidence of priority. All that is needed for certain proof is the discovery of a suitably stratified site containing the two cultures. In view of the migratory habits of these early neolithic farmers

this is not likely to be found, and the evidence at hand may have to suffice.

O. N. Bader reports on work between 1947 and 1950 on the late neolithic habitation site called Bor II on the Chusova river in the Molotov oblast. No structural remains were found though there were masses of uninterpretable post holes, hearths, rubbish pits and the like. The quantity of pottery found helps to clarify the sequence in the transition from the late neolithic to the early bronze age in the Kama river basin, giving us for the first time a well developed site of the Astruntevski type and supplementing the information originally supplied in the thirties by Prokoshov and Schmidt when they determined the culture sequence for this area.

Five barrows originally excavated in the 1890's by E. Rösler and mentioned by him in the *Zeitschrift für Ethnologie* and other journals of the period, are republished by K. Kh. Kushnareva in an article on the bronze age in the highlands of Karabakh (Armenia). The author decides that the barrows belong to the early bronze age and date around the beginning of the second millennium. She discusses the relationships with barrows of similar type in the area in a general synthesis of the important early bronze age remains.

The Andronovo culture is of late neolithic or early bronze age date, and is spread over a very wide area from the Yenisei and eastern Kazakhstan to the Urals. The nature of the soil has, however, made the excavation of the sites a vexing problem with the unclear stratigraphy that results from shifting sands. The sites of the same culture in the Urals, however, some thirty in number, are in a much better pedological situation, and K. V. Salnikov presents the partial results of the excavation of three of them, together with a distribution map of the other known centers. The basic study of the Kazakh material is that of Kritsova-Grakova on the Alexseevsky cemetery, and this new publication provides a check on some of her findings, though the information on the excavated sites is not detailed enough to provide the basis for an independent judgment.

Classical archaeology is not slighted in this volume, though the studies are definitely not up to the standard of the works of the prehistorians. Tsalkin contributes a note on the bone material from the Neapolis excavations, which apart from the elaborate statistics presented contains the rather interesting conclusion that fishing played an insignificant role in the economy of the town during the Scythian period. Comparisons of species of animals represented in the wall paintings with the bone remains shows a very close observation of nature on the part of the artists. The care taken in recording and identifying a massive quantity of bone material from a long occupied site is impressive.

B. D. Blavatsky contributes a historical study on the question of the history of slavery in the states of the

northern Black Sea littoral. He concludes that at the time of the founding of the cities in the 7th century, when economic connections with the Mediterranean were only just barely established, a fully developed slave economy did not yet exist. It begins, he thinks, with the rise of the Hellenic towns in the 6th century, but throughout the 6th and 5th centuries small producer economy continued to play an important role. Among the surrounding tribes of the Taurus, slaves were not yet known though the Scyths had a few. With the appearance of the Greek states of the 5th and 4th centuries slavery as a basis of production took a big step forward, a development paralleled in Scythian territory during the 4th century. The later 4th century increased the number of slaves considerably and reduced the importance of small farming even more. The 3rd and 2nd centuries are blank due to lack of sources, though there is some evidence of slave revolts at the end of the 2nd century. During the Mithradatic and Roman domination slavery reached its peak, after which it began to decline slowly during the 1st to 3rd centuries, as indicated by the increasing number of manumissions. Slave labor in agriculture is gradually replaced by a peasant economy with the peasants tied to the land. The economic role of the cities declined as exchange fell off and the area developed the natural economy of the early middle ages. Evidence for all this is adduced from the archaeological record as well as from the literary and epigraphical sources, though from the same material others may not reach quite the same conclusions.

Other articles deal with later archaeological material. Karger reports the excavations at Pereiaslavl Khmelsky during 1952-53, a mediaeval site. Bliefeld studies the burials of the 9th to 11th century pit cemeteries of the middle Dnieper region. Rappaport reviews the mediaeval monuments in Kholm, while Miloradovich treats the 14th to 16th century barrows of Kabardinsk. Mandelshtam's views on the formation of the Tadjik nationality and Beregovai's review of the finds of 18th century Eskimo culture in the Bear islands north of the Kolyma river are concerned with events that are so recent as scarcely to fall within the normal province of archaeology.

On the whole, this number of *Sovietskaja Arkheologia* is not so rich as some of its predecessors, but since some of the material is presented in summary form, it whets the appetite for what is hoped will be more elaborate publications.

IRWIN SCOLLAR

UNIVERSITY OF EDINBURGH

FIVE YEARS OF COLLECTING EGYPTIAN ART, 1951-1956. Catalogue of an Exhibition Held at The Brooklyn Museum 11 December, 1956 to 17 March, 1957. Pp. v + 63, pls. 96. The Brooklyn Museum, 1956. \$3.50.

During the past decade or so the Brooklyn Museum has come steadily to the fore as one of the leading museums in America, and therefore of the world, for the acquisition and display of Egyptian antiquities with a predominantly artistic appeal. This proud position has been won not merely by the favourable provisions of the Wilbour endowment. If the spending of large sums of money were the only criterion, many more lavishly provided museums would have achieved a like eminence. The real reason for this rise to distinction is to be sought in the judgment and scholarship of the professional staff, sustained by the support of enlightened trustees. The eleventh hour for the collecting of Egyptian antiquities has long since struck, and success would not have come to Mr. John D. Cooney, the Curator of the Egyptian Department, and Mrs. Elizabeth Riefstahl, the Assistant Curator, if they had not exercised the most unrelenting enterprise in hunting down and acquiring antiquities of merit and importance. Since the war there has scarcely been an auction sale of antiquities in the Western world in which the significant pieces were not already known to the Brooklyn Museum, often in more precise detail than that employed by the cataloguers. Mr. Cooney's acquaintance with the relevant private collections of Europe is comprehensive, and his awareness of the volume and direction of traffic in the antiquarian market is no less extensive and shrewd. Without such expertise, very few of the treasures in this exhibition would have been acquired, but instead a mass of expensive and inferior mediocrities could very well have taken their place.

The reviewer who picks up this sumptuous catalogue, therefore, can have no envious feelings that the notable pieces that have been acquired by the Brooklyn Museum are the result of good fortune or vast expenditure, for they have been won only by hard work, discriminating taste and a profound knowledge of the subject.

In some ways this lavishly printed and illustrated catalogue can give a misleading picture of the achievements of the past five years at Brooklyn. Most museums have to acquire, apart from the more spectacular works of art, small, often fragmentary, and unprepossessing documents that are indispensable for a better understanding of art history and the development of style and iconography. Particularly is this so in the collecting of antiquities. Such scientific material is usually reserved for the study collections and is seldom seen except by scholars in some back room. In this catalogue, however, such pieces are illustrated and described as fully as the *chefs d'oeuvre*. In thus putting all its goods on the counter and not being content with elegant window dressing, this publication breaks new ground. And on closer inspection it will be seen that the smaller bits and pieces nearly all have something to recommend them even to the layman. Many (e.g. Nos. 11b, 16, 20, 23, 40, 47, 48b, 56, 69, 72a) are unique, and others widen the horizons of Egyptology (e.g. Nos. 10, 27b, 33, 38b, 50, 55, 63).

It is, however, in acquiring Egyptian antiquities as works of art that the main activities of the Department have centered, and it must be judged on the extent of its success in that field. In the reviewer's opinion, its achievement here is remarkable. Works of art may be grouped into two categories. There are first those really rare and supreme pieces which stand outside time and space and speak with a universal voice and undiminished authority over the years; and there are also those others that have to be judged strictly within their own context and for the enjoyment of which there must be a certain amount of intellectual preparation. In this present exhibition there are two pieces which immediately recommend themselves as being in the former category. The portrait head of the Persian period (No. 13) reveals in a particularly powerful manner those essential features which Egypt has contributed to the sum total of art experience, an idealistic portraiture expressed in the "cubistic" management of planes and the formal relationship of individual masses, the whole achieved by a precise and masterly technique. No greater contrast could be found to this, with its serene inner life, than the Hellenistic portrait of Alexander (No. 23) with its nervous "romantic" handling and its surface movement and vitality. About the second masterpiece, the head of a colossal female sphinx (No. 2), it is possible to have some slight reservations, for it must be confessed that if the eighteenth century prosthetics were removed it would be a sad wreck of former majesty; and one can appreciate the dilemma of the British authorities in considering whether to grant permission for its export. Nevertheless for the Egyptologist who can visualize what it must have been like in its heyday it is a truly impressive piece and one likely to deepen his already profound respect for the achievement of the best Middle Kingdom sculptors.

In the second category of art objects—those which must be judged more in relationship to their cultural complex—there are examples of high merit (e.g. Nos. 1b, 3, 4, 7, 9a, 9b, 10, 11a, 14, 15, 22, 23, 25, 33, 35, 37, 38, 48, 56, 60, 61, 63, 70, 73, 77), some of which may properly claim to be considered as masterpieces. Of these, the most striking is the wooden statue of Methethy (No. 18) in less formal costume (described in the catalogue as "Methethy in old age"). The vast majority of the wooden portrait statues of the Old Kingdom are mere journeyman's products, with the unhappy articulation of the limbs and torso that one sees in No. 1a, for instance. This statuette is remarkable for the complete correspondence between body and limbs and for the alert poise, which is one of arrested movement rather than the more usual congenital paralysis. In the same group, but on a less ambitious scale, mention ought to be made of the statuette of a mother and child (No. 4) a charming unpretentious work in a genre style which is notable for its plastic qualities and its successful capture of a mood. The wooden statuette of Tutu (No. 9a),

though more finished and sophisticated, is virtually in the same tradition and scarcely more successful.

In a review of restricted scope, however, it is really invidious to single out items in this group for special mention. All of them merit study and attention, the smaller pieces as much as the larger. Of course, Egyptology being what it is, there are a number of points on which it is possible for the reviewer to differ from the opinions expressed in this catalogue, though such disagreements are considerably fewer than is usually the case with similar publications. Thus this writer would dispute that No. 11b is necessarily of Amarna date; and he has doubts about the authenticity of No. 19. No. 25 to him in its iconography, proportions, and "hard" style is evidently a work of the late XIIIth-early XIIth Dynasty, though produced under the inspiration of the Pepi II funeral monument. He has noted one misprint on p. 17 where *Kheprsh* is incorrectly spelt. The main bone of contention, however, is the apparent denial (cf. pp. 9-11) of a co-regency between Amenophis III and Akhenaten, a matter that is of cardinal importance for the interpretation of the art of the period. This is not the place, however, to engage in a specialists' wrangle and the reviewer will shortly have more to say on this subject elsewhere.

The objects described in this catalogue have been collected over the past five years when Mr. Cooney was the Curator of the Department and Mrs. Riefstahl the Assistant Curator. The latter has now become Associate Curator Emeritus and Mr. Bernard Bothmer, whose scholarly hand is apparent in several of the catalogue entries, has become Assistant Curator. This constitutes as formidable a team as one could imagine, and although in the present state of the market the successes of the past can hardly be expected, this reviewer for one looks forward to the harvest of the next five years at the Brooklyn Museum with lively interest.

CYRIL ALDRED

ROYAL SCOTTISH MUSEUM,
EDINBURGH

DIE ALTÄGYPTISCHEN SCHERBENBILDER (BILDOSTRAKA) DER DEUTSCHEN MUSEEN UND SAMMLUNGEN, by Emma Brunner-Traut. Pp. xi + 146, figs. 40, pls. 49. Wiesbaden (Franz Steiner Verlag), 1956.

One hundred and sixty-nine of the ostraka catalogued and discussed in this admirable publication are (or were before the last war) to be found in the great German collections of Egyptian antiquities in Berlin, Munich, Leipzig, and Hildesheim, with four others divided between the museums and universities of Hamburg, Tübingen, Heidelberg, and Vienna, and one in the private collection of Dr. Kurt Herberts. Of the one hundred and seventy-seven drawings and colored sketches preserved on these flakes of limestone and fragments of pottery almost all are illustrated in line or (in thirteen cases) in color in the book's frontis-

piece and first forty-five plates, the remaining three plates being taken up with photographs of sculptors' studies, and the like, used as comparative material.

Besides the museum number ("Berlin 214367") the catalogue entries give in each case the dimensions and material of the piece, the technique employed in producing its drawing or painting, its condition, provenance, and dating, the pertinent bibliography, and a selection of parallels. For the last Dr. Brunner-Traut has had recourse to more than four hundred sketches on flakes and potsherds preserved in museums and private collections the world over. Within the catalogue the drawings are grouped in order according to their subject matter, starting with representations of anthropomorphic divinities and divine barques and continuing with drawings of royal and private persons, foreigners, divine animals, animals which figure in myths and stories, ordinary domestic and wild animals, plants, architectural elements and plans, inanimate objects and lists, and, finally, hieroglyphs and practice sketches.

The catalogue proper is preceded by a Foreword and a substantial and extremely valuable Introduction comprising general discussions of the ownership and provenance of the ostraka, their materials and sizes, the techniques used, the subject matter, the purposes and originators of the different classes of drawings, the style and style development, and the dating. It is followed by a tabulated summary of the key items of information given in the catalogue and by six indices which add enormously to the usefulness of the book.

In this fine series of drawings and paintings, most of which originated in the Theban necropolis during Ramesside times (Dyn. XIX-XX), the student of Egyptian art will find many old friends—famous drawings, some, unhappily, destroyed or lost during the heavy bombing of German cities in 1944. Such pieces are the satirical sketch of the lady mouse having her hair dressed by an attendant cat (Munich 1549), the kinky-haired Nubian and his oboe-playing ape (Munich 1540), the goddess Astarte on horseback (Berlin 21826), the king at the Window of Royal Appearances (Berlin 3316 verso), the squatting figure of Amenhotep, Son of Hapu (Berlin 21447 verso), the naked peasant woman blowing up the fire in her baking oven (Leipzig 1894), and the Queen of Punt sketched from the Deir el Bahri temple relief (Berlin 21442).

Die altägyptischen Scherbenbilder is a book which will certainly take its place among the standard works on Egyptian drawing and painting. One of the most complete and richly documented treatments of its subject yet produced, it can hardly fail to be a welcome addition to the library of the Egyptologist and art historian, and, one ventures to think, a source of considerable interest to the creative artist.

WILLIAM C. HAYES

THE METROPOLITAN MUSEUM OF ART

THE EGYPTIAN COFFIN TEXTS VI: TEXTS OF SPELLS 472-786, by *Adriaan de Buck* (The University of Chicago, Oriental Institute Publications, vol. 81). Pp. xvi + 415. The University of Chicago Press, 1956.

To his five preceding volumes of this standard publication of the Coffin Texts Dr. de Buck has now added a sixth, containing the texts of three hundred and fifteen additional spells (472-786) and the usual lists of sources and tables of parallels (see *AJA* 56 [1952] 215 and 60 [1956] 289).

The present series of spells were copied from coffins, canopic chests, burial chamber walls, funerary masks, and papyri coming from nine different Upper Egyptian sites (Aswan, el Bersheh, Beni Hasan, Gebelein, Lisht, Meir, Siut, Sakkarah, and Thebes). They include ninety sections of Pyramid Texts and the whole or parts of twenty-three "chapters" of the Book of the Dead.

WILLIAM C. HAYES

THE METROPOLITAN MUSEUM OF ART

TWENTY-FIVE YEARS OF MESOPOTAMIAN DISCOVERIES (1932-1956), by *M. E. L. Mallowan*. Pp. v + 80, pls. 2, figs. 18, and map. The British School of Archaeology in Iraq, London, 1956.

In order to celebrate the Silver Jubilee of the British School of Archaeology in Iraq, which was founded in January 1932, an exhibition of a selection of the finds was arranged, most appropriately, in the Assyrian Basement of the British Museum during the winter of 1956-57. This Silver Jubilee was further commemorated by this booklet written by the very able Director of the School, M. E. L. Mallowan, Professor of Western Asiatic Archaeology in the University of London. The booklet indicates, as did the exhibition, the extraordinary scope of the work undertaken during these past twenty-five years. The results have been published in greater detail in the eighteen volumes of the School's official Journal, *Iraq*, but here, in condensed and revised form, the work of the entire period can be easily studied. It has been brought up to date and in this convenient and handy form the work of the School can be seen in a perspective not possible in the fuller publication.

The period covered is immense, some five thousand years, and the excavations were carried out in a very considerable area but, when one has finished reading the various reports, the statement that each enterprise was undertaken with a view to solving certain definite problems is completely borne out. These aims were often achieved, and it is a measure of the lucid and frank approach of the author that he has a paragraph at the end of each section which indicates further problems raised or yet to be solved.

The book is divided into six main sections: Arpachiyah, Chagar Bazar, Brak, the Balikh Valley, Nimrud and Balawat. At Arpachiyah an attempt was made to see the relation of "Halaf" ware to the southern "Ubaid." Here the evidence of early domed architecture was discovered, and it and the colored pottery dated to about 5000 B.C. In 1934 the School worked in Chagar Bazar after mapping a number of mounds in the hitherto unexamined area of the upper Habur Valley in northeastern Syria. The site was dug to virgin soil and it was found that it had been occupied from c. 5000 B.C. to c. 1400 B.C. It produced interesting material of all kinds, including tablets of the second millennium B.C., and the suggestion is made that the relationships of various peoples in the Habur in times past were not very unlike that of the near present when Kurds and Arabs lived together under various dominant powers. At Brak, Eye-Temples were discovered, which were found to have been looted for treasure for nearly a thousand years after they had been built. Another revelation was the close touch before 3000 B.C. between this city and that of Sumerian cities in the south. Again there are strong hints, as at Arpachiyah, of links with the Eastern Mediterranean.

In the Balikh Valley six sites were examined and among the *Problems* the remark is made that the Islamic remains of Raqqa must contain a mine of information. The excavation of this site is a crying need, for precise information of this important city is sadly scanty and poorly integrated.

The last sections deal with the work at Nimrud and Balawat, where a great mass of interesting material of all kinds has been gathered: historical, architectural and artistic. The combination of these is of the utmost importance for, apart from the newly gathered information, it also throws greater light on the results of past excavations in that area. Among other things the controversy over the place of origin of the famous bronze gates in the British Museum has been settled, and now in its turn Baghdad Museum is being enriched with further examples of this type of metal work. All in all, it is obvious that tribute is due not only to the British School of Archaeology in Iraq with its able officers, but also to the enlightened policy of the Antiquities Service of Iraq, which has helped to further this search into a past that is of interest to people in so many parts of the world.

C. K. WILKINSON

THE METROPOLITAN MUSEUM OF ART

FROM THE TABLETS OF SUMER: Twenty-five Firsts in Man's Recorded History, by Samuel Noah Kramer. Pp. xxv + 293, pl. figs. 80, text figs. 81. The Falcon's Wing Press, Indian Hills, Colorado, 1956. \$5.00.

Those acquainted with recent work in Mesopotamian history and archaeology do not need to be told that

Professor Kramer is one of the world's leading Sumerologists. For the past twenty-six years he has devoted himself to the difficult, in fact often tedious and exasperating, task of copying, translating, and piecing together the ancient documents from which the material in this book was distilled. Much of this research has been published in highly specialized articles and monographs, often inaccessible and incomprehensible to the layman and non-specialist. Thus it is with gratitude that we view the publication of a volume written for the general public and comprising "many of the significant results embodied in those researches."

The present book "consists of twenty-five essays strung on a common thread: they all treat of 'firsts' in man's recorded history. They are thus of no little significance for the history of ideas and the study of cultural origins." Professor Kramer has been intrigued by "firsts" for some years. This book, in fact, is an expansion of an article that appeared in *Archaeology* 7 (1954) 138-48, "Four Firsts in Man's Recorded History: School, Law, Taxes, Wisdom." This approach is obviously calculated to appeal to the general reader as well as the scholar interested in "origins." But Professor Kramer points out that "this is only secondary and accidental, a by-product, as it were, of all Sumerological research. The main purpose of these essays is to present a cross-section of the spiritual and cultural achievements of one of man's earliest and most creative civilizations." This the book achieves, providing a fascinating glimpse into the ideals, attitudes, and activities of this ancient people.

It is particularly difficult to understand, or even attempt to understand, the thought processes of a people so remote as the Sumerians, who in fact had totally disappeared from the memory of man for over two thousand years. In the past century much has been learned about the Sumerians as a result of the efforts of archaeologists and Sumerologists. And Professor Kramer has done as much if not more than any other scholar to bring this nation to life again. In this accomplishment he may be excused certain histrionic devices such as the constant emphasis on "firsts" that forms the theme of this book. Professor Kramer himself is careful to state that these are firsts in "man's recorded history," but perhaps it would have been fairer to emphasize, for the benefit of the general reader, that the difference between the earliest and the earliest record is considerable. Moreover, in this assessment of priorities the author has altogether ignored the achievements of the Egyptians. Perhaps this will do no harm, since many modern textbooks have tended to neglect the Sumerians in favor of the better-known Egyptians. But it is misleading to discuss origins in the Near East with but one reference (p. 152) to ancient Egypt. True, the Egyptians borrowed much from their eastern neighbors—certain artistic motifs, the cylinder seal, techniques in building in mud brick, probably the potter's wheel; but many things appeared at about the same time in these great river valleys, making it

almost impossible in many cases to determine the source.

The Egyptians, for example, may have learned the principle of writing from Mesopotamia, but this is not certain. What we do know is that writing is about as old in Egypt as in Mesopotamia, and the hieroglyphic script needed scribes as highly trained as did the cuneiform. Professor Kramer is perfectly correct in saying that the earliest school records come from Sumer, but we must remember that schools in Egypt were well-established by this time. It is true also that the Sumerian texts provide a more vivid and more human picture. Of great interest and at the same time very amusing is Professor Kramer's "Schooldays" text. The story has been continued by Professor Gadd, and it is now possible to follow the student hero of this tale further in his educational experiences (C. J. Gadd, *Teachers and Students in the Oldest Schools*, University of London 1956, pp. 29ff).

Professor Kramer writes of the "first pharmacopoeia," a list of prescriptions, "the only medical text as yet recovered from the third millennium B.C.," with no reference to the more famous medical text from Egypt, the Edwin Smith Surgical Papyrus. Admittedly this is known only from a seventeenth century copy, but it is almost certain that the basic text precedes the Fifth Dynasty and may go back much earlier. Professor Kramer credits the Sumerians with man's first cosmogony and cosmology. It is true, again, that Sumer has provided us with the earliest extant texts, but the so-called "Memphite Theology," although it survives only in a late copy, can be quite confidently dated to the Old Kingdom (possibly c. 2770) on linguistic, philological, and geographical evidence. This document with its insistence on a creative and controlling intelligence is of a higher philosophical calibre than anything as yet known from Sumer and in fact is a more sophisticated document than anything from later Egypt. In it, as Professor Breasted pointed out, the ancient Egyptian approached the Logos doctrine of the New Testament. These remarks are not intended to suggest that Professor Kramer should have discussed Egyptian texts in detail, but in these and a few other instances, mention of Egyptian contributions equally old would have provided a more balanced picture.

A number of questions are raised by one chapter in particular, that is the author's thesis that the Sumerians had a Heroic Age comparable to the Greek, Indian, and Teutonic Heroic Ages, and that this provides a solution to the "Sumerian question" (pp. 227-248). This imaginative and thought-provoking essay first appeared with fuller documentation in this journal in 1948 ("New Light on the Early History of the Ancient Near East," *AJA* 52 [1948] 156-164). Now the Sumerians certainly had what can be called an epic literature, though it was not until the Babylonian poets that the disconnected Sumerian tales were integrated into lengthy units. From this Professor Kramer assumes that the Sumerians had a Heroic Age and that

the factors responsible for its origin and development were analogous to those responsible (following Chadwick) for the origin and development of the Greek, Indian, and Teutonic Heroic Ages. He sees "no reason to assume otherwise" and concludes on the basis of his assumed parallel development that "the Sumerian Heroic Age must have coincided (as did the others) with a period of national migrations. More important, the occupation of Lower Mesopotamia by the Sumerians, which gave birth to their Heroic Age, must have marked the culminating stage in a historical process that had begun several centuries earlier, when Lower Mesopotamia was still part of a power whose state of civilization was far more advanced than the civilization of the Sumerians, who were settled somewhere along its outer fringes. It is from this more civilized power that the relatively primitive Sumerians had absorbed some of the essentials of its military technique as well as some of its cultural attainments. . . . As a result of determining the existence of a Sumerian Heroic Age, we seem justified in drawing the conclusion that the Sumerians were not the first settlers in Lower Mesopotamia, but that they must have been preceded by a civilized power of some magnitude."

In the first place, the fact that there are some similarities between the epic material of Sumer and that of Greece, India, and northern Europe, does not in itself justify the assumption that there was, therefore, parallel historical development. Professor Kramer is quite right in maintaining that new evidence is needed to resolve the problem of the Sumerians to the satisfaction of all, but a solution such as he proposes, ingenious though it may be, must at least agree with the few facts we do know. On the basis of the Heroic Age argument the author postulates an original "peasant-village" culture introduced from Iran. It must be pointed out here that it is *not* now generally assumed (as suggested by the author, p. 241) that the early village culture in Lower Mesopotamia was necessarily introduced from southwest Iran. This remains a possibility, but the archaeological evidence points more and more to its being indigenous; certainly the early cultures in the north of Iraq, in particular Hassuna-Samarra, are much closer to Eridu XIX-XII than anything known as yet from Iran. Professor Kramer's first stage is, in fact, purely hypothetical.

There is, equally, a complete lack of archaeological evidence for an earlier state more advanced than the Sumerians, the "Irano-Semitic urban state" which "weakened and tottered" (pp. 243-44) as the Sumerians assumed the leading role. On the contrary, the present evidence, in particular that from Eridu, points to a long history of development that seems to have proceeded more or less without interruption from the Ubaid period to the period of the earliest pictographic tablets when we are unquestionably in contact with the Sumerians. It seems quite likely, in fact, that there were both Semites and Sumerians in Mesopotamia at the time of the earliest known settlement at Eridu, although we know little of the former until the time of

the Akkadian Sargon. Professor Kramer has stated that more archaeological evidence "will do little to resolve the deadlock." Recent excavations, in particular at Eridu, have added much relevant material, however, and it can be hoped that more information from Warka will help clear up some of the many problems. Certainly the hypothesis that there was yet another group from whom the Sumerians derived their knowledge is without foundation and brings us no closer to a solution of the problem of Sumerian origins.

These criticisms, it must be pointed out, are in no way meant to detract from the value of this book. The material presented is full of interest both to the specialist and the general reader. The interpretations are imaginative, and the ancient documents themselves are put before the reader "so that he can sample their mood and flavor as well as follow the main threads of the argument." Government and politics, education and literature, philosophy and ethics, law and justice, even agriculture and medicine are discussed. In fact the book serves the useful purpose of collecting much scattered information under one cover. Some new material is found here, including fragments that fill gaps in known texts and an interesting appendix on the literary tablets studied by Professor Kramer in 1955 in the Hilprecht collection in Jena. Credit is given generously to fellow Sumerologists, but it is Professor Kramer who, in this as in his previous books, has recreated for us more clearly than any other scholar the rich literature from the tablets of Sumer.

JOAN OATES

BAGHDAD

DIE HOMERISCHE WELT IM LICHT DER NEUESTEN AUSGRABUNGEN, by Roland Hampe (Sonderdruck, *Gymnasium*). Pp. 57, figs. 22, pls. 16. Heidelberg, 1956. DM 4.00.

Hampe's latest pamphlet surveys some of the high spots in Aegean archaeology since the war, making a cohesive summary of current excavation materials, together with reviews of more familiar areas, for those who have not kept up with the archaeological journals. Careful to limit himself to the late Bronze Age, not the eighth century (with the understandable exception of the Nestor cup from Pithecusae), he touches on major and minor sites alike, such as Mycenae and Dramesi, with clarity and imagination.

DRAMESI. Taking the Catalogue of Ships as a starting point, Hampe adopts Blegen's interpretation of the ship-graffito found in the tholos tomb at Dramesi as a memorial to some leader of a Boeotian naval contingent in the Trojan War (*Hesperia*, Suppl. 8 [1949] 38, pl. 6). Dramesi is identified with ancient Hyria, neighbor to Aulis and head of the Catalogue. No good context for the stela survived, but it is close in graphic style to the pot-drawing from Asine of LH III C 1 (Furumark, *MP*, Mot. 40.3; the illustrated Tragana

parallel is less good). An approximately contemporary doodle-stela with ship from Enkomi has no funerary significance at all (Schaeffer, *Enkomi-Alasia*, pl. x, fig. 38).

PHARSALA. Verdelis' excavations have demonstrated the survival of traditional Mycenaean tomb-construction techniques into the sixth century. The archaic tholos overlies a Mycenaean chamber-tomb, and Hampe approves the idea of a Heron of Achilles, to match the known cults of Thetis and Cheiron in this district. He connects with this hero-cult the famous Sophilos sherd showing the Games for Patroklos, found nearby, and the new Exekias krater from the tomb itself with the fight over the fallen warrior ('Eφ 'Αρχ 1952 [1955], 96); the proposed identification of Pharsala with Homeric Phthia looks fairly strong.

ELEUSIS. Mylonas' excavations, and especially the precinct of the Seven Against Thebes, are briefly touched; there should be a reference to *Proc. Am. Phil. Soc.* 99 [1955] 57.

MYCENAE. Highlights of the new grave circle (B) are preceded by an unnecessary review of the Schliemann circle (A) with plans and restorations. Hampe bases his information for Circle B on the reports in *Πρακτικά* and *BCH*, 1952ff; the uninitiated student should have been told also of *ILN* Sept. 27, 1952, and Feb. 20, 27, March 4, 1954; Wace and Stubbings, "The Grave Circle," *BSA* 49 (1954) 244; Mylonas and Papademetriou, "The New Grave Circle at Mycenae," *Archaeology* 8 (1955) 42; and now Mylonas, *Ancient Mycenae*, 128-175.

The "shield burial" in Grave Γ (pl. v a) leads H. into general considerations of Mycenaean armor, in the course of which he agrees with Lorimer that graves were not native Achaeans' equipment. He discounts Yalouris' new pair from Kallithea, south of Patras, as probably imported from north-central Europe (*BCH* 78 [1954] 125), and the old Enkomi pair, because Cyprus is "nicht das griechische Mutterland." This seems militarily disparaging to two known centers of Mycenaean occupation. H. insists with Lorimer that *ἐκνήμειος* is either a consistently seventh century interpolation in Homer, or refers to cloth-and-leather padded gaiters as on the new fresco fragment from Mycenae (*BSA* 48 [1953] pl. 9).

PYLOS. H. reproduces a plan of the palace, suggests an idiosyncratic character for Messenian architecture, and stresses the "Aeolic" capital types, represented by ivories from the houses at Mycenae, as the normal Bronze Age form which only came back to Greece in the sixth century (23). He proceeds to a clear summary of the contents of the Pylos tablets, taking his conclusions largely from Furumark (scarcely mentioned) and Mühlestein. His treatment of salient cultural features (not linguistic) is a good introduction for the non-specialist. He is sure that literacy was widespread, even warriors being sent to school, and that many documents of possible diplomatic or literary value were recorded on skins (vs. the Ventris-Chadwick palm leaves). He interprets *di-pte-ra-po-ro* (PY Fn 40.6) as

"Schriftrollenverwahrer" rather than "tanner," the first librarian in Linear B. Hampe visualizes the king of Pylos as a politically crafty but morally unruly William the Conqueror with his Domesday Book, approves Indo-Germanic parallels to Pylian social structure (not crediting Palmer), and uses the "captive women" of the A-tablets a trifle uncritically to prove energetic Pylian intercourse with the eastern shores of the Aegean. If Dr. Angell is right in interpreting three skulls from a well in Mycenae as once having belonged to Cypriote ladies, we must hope these foreigners had a gayer time at Pylos. Hampe ends by emphasizing the Thessalian (Aeolic) ancestry of the Neleids, though he does not discuss specific Aeolic dialect features in Mycenaean.

The pamphlet is succinct, suggestive, a good mixture of review and up-to-date report for Homeric scholars and beginning archaeologists.

EMILY TOWNSEND VERMEULE

BRYN MAWR COLLEGE

L'AURIGE (Fouilles de Delphes, vol. iv, Monuments Figurés: Sculpture, fasc. 5.), by *François Chamoux*. Pp. 92, figs. 8, pls. 23, frontispiece. Paris, Boccard, 1955.

The appearance of the fascicle on the bronze charioteer in the fourth volume of *Fouilles de Delphes* is a more welcome event and fills a more urgent need than one might imagine who knew only that the statue was found in 1896 and has gone on being written about and photographed ever since. This is so not only because Chamoux's clear, brief and readable text will absolve today's students from having to wade through much of the massive bibliography that has by now accumulated; more important is the fact that it dismisses decisively and without undue fuss some wrong assumptions about the charioteer that have won acceptance in the most respectable quarters and are even now proliferating in handbooks and academic oral tradition. The book is, as the author truly says, not a polemic. Nevertheless it is fortunate that this part of the official publication was still outstanding, for now we have the corrected observations of fact conveniently coupled with a good set of plates and the necessary drawings of details.

The introduction describes the finding of the charioteer and gives a bibliography of those works which have made progress in the study of the monument or at least presented original theories. These are listed in chronological order along with a brief statement of the contribution of each. This alone comprises forty-five items. Surely most readers will be grateful to the author for omitting the many general works and studies which discuss the charioteer as a part of the history of fifth-century sculpture. Those who want more references are told where to look for them.

Chamoux distinguishes two main phases in the scholarship on the monument. Up to 1914 scholars were concerned mainly with the dedication: the reading of the erased first epigram, the identity of the dedicator and the reasons for altering the inscription. After 1914 the problems of the style of the sculpture and the school of the sculptor predominated. Opinion had begun to crystallize on these two subjects, attributing the dedication to Polykalos and the work to a western Greek sculptor, probably Pythagoras of Rhegion, when in 1941 R. Hampe broke the pattern by reviving the twice-rejected idea that a block bearing the signature of Sotadas of Thespiiai was part of the base of the chariot-group. He restored the base with the epigram on the side and the Sotadas block on the front.

Chamoux therefore does his work from the ground up, starting with the block which bears the surviving part of the dedication. This block is described in detail and presented in scale drawings of top, front and right side. That of the top shows not only the clamp-cuttings and the three cuttings for attachment of horses' feet but also the modern circular cutting (from the former museum installation) which has obliterated most of the middle hoof-cutting. The other two contain lead and the thin bronze tenons that held the hooves in place. The attachment near the left front corner of the block shows no outline of the edge of the hoof around it; the hoof must have touched the ground only with the tip. Around the attachment nearest the right edge of the block the trace of a hoof resting flat on the ground is said to be clearly visible. This points toward the inscribed face of the block (the surviving bronze front hoof fits the trace when so pointing) and thus proves that the front view of the chariot group was regarded as the principal one, though the profile may have been more interesting in the purely formal sense. (Similarly the almost contemporary group of the Tyrannicides in Athens must have borne its epigram on the front.) No photograph is given of the top of the block, and perhaps the trace of the hoof is not such that it could be made to show in a photograph. Nevertheless, a view showing the cuttings and the top surface in general would have been interesting. W. B. Dinsmoor tells me that the trace of the hoof has always been plainly visible on the stone and led him to accept a frontal placing of the group in 1912. (Hampe, who apparently failed to see the trace, restored on this block the rear hooves of horses placed parallel to the inscribed face.)

From analogies in both sculpture and painting Chamoux concludes that in four-horse chariot groups the trace-horses normally are shown slightly in advance of the pole-horses. The preserved block therefore held the two front feet of the right pole-horse and one front foot of the right trace-horse. The adjoining block which held the other foot of this horse must have been wide enough to accommodate the beginnings of the two lines of the epigram. It thus would provide space for a boy-groom holding the head of the horse. Chamoux reattributes to the Polykalos

group the child's arm which Hampe had given to a separate dedication. He pictures the chariot as standing before the judges, the horses stepping in place. The victorious charioteer has just received his fillet and put it on. The horses are still excited from the race, and the groom's help is needed to keep them quiet.

The author admits the possibility of a symmetrical arrangement with a groom on each side, but the narrower restoration which he seems to prefer strikes the reviewer also as preferable. A conjectural restoration of the base is given in plan but not in elevation. It would have been good to have a restored elevation of the horses (the reviewer agrees with the author that Hampe's horses look narrow-chested) and also a restored drawing to scale of the inscription in the text which Chamoux tentatively accepts. He suggests a width of 3.26 m. (11 feet, assuming that the foot used in Delphi is 0.296 m.) and a depth of 2.37 m. (8 feet) for the monument. The calculation of the probable width of the chariot and its wheel-base and the spacing of the pole-horses, all of which would have been of interest to the reader and which must have been worked out by the author before he could arrive at his minimum width in feet are not communicated. The total dimensions of the base in feet are less interesting because they involve two uncertainties: whether the total width was an even number of feet and whether the foot was really 0.296 m. The height of the surviving block, 0.298 m., though it recurs at Delphi (notably in the Sotadas block), does not necessarily represent one foot. Dinsmoor tells me that the three lower steps of the west front of the Propylaea in Athens, where a foot of 0.327 m. was used, all measure from 0.298 to 0.299 m. in height.

Chamoux would date the Pythian victory won by Polykalos, tyrant of Gela, which was the occasion of the dedication of the group, in 478 or 474 B.C., more probably the latter. Because of the considerable difference in letter-forms and style of cutting between the original dedication and the recut first line of the epigram, he concludes that the recutting took place after the fall of the Deinomenids, when the citizens of Gela emended the dedication in order to remove the offensive words Γέλας ἀνάσσειν with which Polykalos had modified his name. Since this is apparently the only place where one of the Deinomenids mentioned his political position in any of the dedications that have come down to us, it is easy to believe that it caused resentment. The resemblance of the letters of the recut first line to those of the base signed by Sotadas appears to support Chamoux's suggestion that the recutting took place in the second half of the fifth century. For the text of the epigram the author adopts an original first line restored by Frickenhaus and a second by Homolle, a revised first line by Wade-Gery.

First:

[Μῆμα Πολύκαλος με Γ]έλας ἀνέ[θ]εκε[ν]

ἀ[ν]άσσ[ον],

[ἵους Δεινομένους, τ]ὸν ἀεξ, εἶόνμ' Ἀπολλ[ον.]

Second:

[Νικάσας ἵπποισι Π]ολύκαλος μ' ἀνέθηκ[εν], κ.τ.λ.

This chapter on the base has two appendices. The first, on the "Cyrenaean hypothesis," is of interest only for the history of archaeology. It describes the long life and influence of a "brilliant" identification which ignored the circumstances of finding of the charioteer and his group. In spite of the fact that the bronzes were found buried in the fill behind the *Ischegeaon*, a wall built following the landslides of 373 B.C., and so must have been destroyed in that catastrophe, the Cyrenaean hypothesis identified the group with one seen by Pausanias in the 2nd century A.D. This approach of brilliant theorists to excavational evidence is by no means unique. Probably it was the author's own interest in Cyrene that led him to include this episode in his book. The next appendix, on the Sotadas block, gives a thorough description accompanied by drawings of top, front, left end and a section of the clamp-cutting. The stone cannot have been part of the Polykalos base for three reasons: The letter-forms are similar to those of the recut Polykalos inscription and not to those of the original dedication. The clamps were not the narrowed-down swallow-tail clamps used in the Polykalos base but hook-clamps, not in use much before the end of the fifth century. The back of the stone has a finished surface meant to be seen, not an anathyrosis, i.e. it was part of a long narrow base only one block deep. Sotadas' work was a male statue, not a chariot group.

The fragments of the horses and chariot are next described, the author becoming almost lyrical in his appreciation of the beautifully drawn locks of the horse's tail. In the interpretation of the chariot fragments he acknowledges his debt to Hampe. Some of the fragments were not accessible for re-examination before this book was published. The arm of the little groom is described, and the fondness of the early classical period for contrasting the forms of a young boy with those of a developed athlete is invoked to explain any differences in modelling.

The charioteer himself is treated in two chapters: "Description and Interpretation" and "Technique." The author thinks it probable that the charioteer stood alone in the chariot, but he does not consider the evidence sufficient to decide this point definitely at present. The section on technique is one of the most important in the book. Chamoux shows that Kluge's theory that the charioteer was cast by the sand-box method was based on inaccurate observation. Notably Kluge's statement that feet and skirt were cast in one piece is refuted by photographs of the figure from below showing the very rough seam by which the feet are fastened to the underside of the skirt. Additional pieces of metal were welded on to reinforce the seam. Chamoux finds no reason to suppose that any part of the statue was cast by any other process than that of *cire perdue*. The head was not cast in a large number of separate parts as Kluge had suggested. The top

of the skull was cast separately (perhaps in order to facilitate setting the eyes into their sockets), but the ears were apparently cast in one piece with the rest of the head. The only small parts attached were some curls in front of the ears and the end of the fillet at the back of the head. Remains of the core, resembling blackened earth, were found inside the charioteer as well as in the horses' legs, and the similarity of the cores reinforces the conclusion that all parts were made by the same process. In the lower part of the body was found an iron armature, of which three rusty fragments remain. A small plate of lead found inside the head behind the teeth shows by its oxidation that it has been subjected to high temperatures, but its purpose remains unexplained.

The thickness of walls which Kluge cited as an argument against *cire perdue* is explained by Chamoux as due partly to the early date of the statue and partly to the fact that thick walls were needed in the Delphi group to enable it to withstand the storms of Parnassus. The author reminds the reader that the mould for a bronze kouros (two-thirds life size) found in the Athenian Agora proves that the lost-wax process had been in use for statues "since the end of the sixth century." (He might have stretched it a bit farther. The shape of the mouth preserved in one of the fragments of the kouros mould scarcely permits a date later than the third quarter of the century.) Why, then, he quite reasonably asks, should the sculptor of the Polyzeos group have chosen an archaic and inconvenient process?

Much still remains to be explained about the development of bronze-casting in early Greek sculpture, but the transition from hammered sheet-metal to hollow casting for statues seems to have taken place without the help of the sand-box. As Jantzen points out (*Griechische Greifenkessel*, pp. 68-69) the intermediate stage for human figures as for cauldron-griffins, was the combination of a hammered lower part with a head hollow-cast by *cire perdue*. The esthetic implication of Kluge's theory with its presumption of carved wooden models has been much stressed by writers on Greek sculpture, and it is good to have the theory contradicted in the case of a famous work like the charioteer, which commands the attention of specialist and generalizer alike. The idea that the bronze sculpture of the early classical period is "glyptic" in its approach owing to the use of the wooden models while that of subsequent periods was "plastic," being based on models in clay, no longer has a leg to stand on. Rhys Carpenter, without committing himself on the question of technique, had already pointed out that Greek bronze sculpture remains essentially glyptic as late as the early Hellenistic period (*M.M.A.R.*, 18 [1941] 75-78). Actually, one need only look at the splendidly "glyptic" terracotta sculpture of the early classical period from Olympia (Kunze, *Bericht über die Ausgrabungen in Olympia*, V, 103-127) to see how little the material affects the style in monumental sculpture.

From a comparison of the charioteer with Attic works (Tyrannicides, Kritios boy, Kleophrades Painter and the Diskobolos of Myron) Chamoux concludes that the sculptor was an Attic artist of the school of Kritios. He finds no such close similarities with Aeginetan or Peloponnesian sculpture. The resemblances to Attic work are indeed so close that we must either accept his conclusion or admit that the style exemplified in the works of Kritios was so wide-spread in the years after Salamis that a sculptor's local origin cannot be guessed from his work.

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THE SCULPTURE OF THE HELLENISTIC AGE, by *Margarete Bieber*. Pp. xii + 232, figs. 712. Columbia University Press, New York, 1955. \$17.50.

If there is any one thing that we can call characteristic of Hellenistic art, it is its rich variety. Like the Old Man of the Sea, it refuses to be held down in any single guise. This may be the reason why all the attempts we have had before at a logical account of the development of sculpture in the Hellenistic age have been disappointing in their meagreness. Too much has had to be left out in order that what remains may present a comprehensible pattern. Dr. Bieber's generously sized and illustrated book is the first to convey a real sense of the wealth and vitality and complexity of this art.

The author has been able to do this largely because she has had the courage to include whatever seemed truly important regardless of whether or not it could be pinned down accurately to a time and place of origin. The text is actually brief in proportion to the number of things presented (and even to the number of things illustrated in the plates), but it is about as long as one wants it to be in a work designed for continuous reading. That Dr. Bieber has been able to aim at and in great measure to achieve continuity of text in a broad survey of Hellenistic sculpture is in itself remarkable. The continuity is, naturally, not that of a logically consistent exposition, for such an exposition could not possibly embrace all that the author wants to bring in. Rather it rests on a serpentine chain of associations that are almost always significant though by no means all of the same order. We are told in the introduction to expect this: "I shall try to combine the three methods used up to now for arranging the material." The whole is not so much an exegesis as a *periegesis*. Like the route of Pausanias, Dr. Bieber's path is not always in a straight line—there are excursions and returns by circuitous routes to points previously visited—but always the purpose of the deviation is to lead us to something genuinely worth seeing.

Again like Pausanias, the author does not scorn to tell us stories along the way. Historical events and personalities are presented in brief sketches together with the descriptions of the portraits of the individuals or

the statues commemorating the events. Lest we press the parallel too far, it must be said that the historical narrative is kept very simple and does not get out of scale with the description of the monuments. Its inclusion is a tremendous help to a large class of readers whose needs have obviously influenced the author in her manner of presentation: the young American students of the history of art. Reared in an essentially German tradition that teaches them to value broad cultural interpretations above the direct interrogation of the monuments, these students nevertheless lack almost entirely the knowledge of the written classics which their teachers took for granted. Dr. Bieber is one of the few classical scholars who has taken the trouble to bridge this gap for them.

The Hellenistic period is defined as lasting from 330 B.C. to 30 B.C., i.e. from Alexander to Augustus, and is divided into early (c. 330-250 B.C.), middle (c. 250-160 B.C.) and late (c. 160-30 B.C.). Some might protest mildly at a division that puts Eumenes II and his brother Attalos II into different periods, but this division does not seriously affect the arrangement of the text (Pergamene art gets a chapter to itself). The intention is clear: to separate the "high baroque" from its later phase.

The author gives due stress to the importance of the fourth century for the formation of Hellenistic styles and starts off with a good general summary of it. Chapter II is named "Greek Sculpture of the Fourth Century" but substantial parts of the two following chapters are also concerned with works produced before 300 B.C. Chapter II comprises Praxiteles and Skopas and what led up to them. Lysippos is taken as the first Hellenistic sculptor, and Chapter III, on his works and those of his school, includes also the portraits of Plato and Socrates (both before and after L.) and the portrait of Menander (the idea being that the sons of Praxiteles got their portrait style from Lysippos because their father was not a portraitist). Chapter IV, "Atticism in the Fourth and Third Centuries B.C.," concerns chiefly portraits, from those of the tragedians in the Lycurgan theater down to that of Chrysippos, but also takes a look at Leochares and some of the later Attic grave monuments.

This gets us fairly well out of the fourth century, but Chapter V, "Asianism in the Third Century B.C.," starts with a flash-back to the Mausoleum under the heading "Greek Artists in the Service of Non-Greek Asiatics," thus permitting the portrait of Mausolus to be considered in series with the portraits on coins of Persian satraps (the rest of the Mausoleum sculpture is discussed in Chapter II under Skopas). The bulk of Chapter V is taken up with an absorbing study of the development of groups in third-century sculpture. This includes a convincing revised reconstruction of the Artemis and Iphigeneia group in Copenhagen, and it takes us down as far as the Ludovisi Gaul. At the end of the chapter, under "Greek Artists in the Service of Hellenistic Rulers," come the early Hellenistic ruler

portraits, Ptolemaic as well as Asiatic, and the works of Doidalsas, Boethos and the younger Bryaxis. That the earliest Ptolemaic works do not come under Chapter VI, "The Art of Alexandria," is probably due to the author's wish to show that in the early Hellenistic period mainland artists travelled freely to execute commissions in various places as they had in the fourth century, and local schools did not properly exist as yet. All the way through the book it is apparent that the author believes much less in the importance of local Hellenistic schools than her main chapter-headings would seem to imply: "It has become more and more evident to me that though definite schools did work exclusively in definite styles through definite periods, no one school maintained a monopoly over any specific style." It would have given the casual reader a better guide to the actual contents of the book if, instead of repeating these chapter-headings at the top of every page, the editor had labelled the topics actually being discussed in these pages.

Chapter VI attributes a softened Praxitelean style to early Alexandrian art and discusses portraits of Ptolemies from Ptolemy III down to Cleopatra VII, as well as genre and grotesque figures with African or Egyptian associations, Greco-Egyptian figures of divinities, and some Aphrodite types of which examples have been found in Alexandria. Herakles in statuettes and reliefs and some scholarly personifications round out the chapter. Chapter VII, "The Art of Priene," in two and a half pages, surveys sculpture excavated on that site. Chapter VIII, "The Art of Pergamon," is one of the most rewarding in the book. The description of the great frieze of the Altar of Zeus is altogether admirable in its vivid analysis of the action and characterization of the gods and giants and its enjoyment of the richly varied and subtly significant details in which the frieze abounds. Most of the important sculpture from Pergamon is included in this chapter, except that draped female statues in mid second century style are left for the next.

Chapter IX, "Rhodes and the Southwest of Asia Minor," starts with the Helios in chariot by Lysippos and the colossus by his pupil Chares of Lindos, both known to us only from literature, though the author suggests that a reflection of the former is to be seen in the Helios metope from Troy. The Hermaphrodite found at Pergamon is taken conjecturally as a Rhodian type because a statuette of this type in New York (first published here) comes from Rhodes. The Nike of Samothrace comes in here, attributed to Pythokritos of Rhodes, and is followed by reliefs, some actually found in Rhodes and others thought to be related. The Apotheosis of Homer by Archelaos of Priene becomes Rhodian by courtesy and serves as a transition to the discussion (via Muses) of the elaborate drapery style of the mid second century in Asia Minor, which Dr. Bieber thinks centered around Rhodes and the adjacent mainland. The author's thorough knowledge of Greek dress makes her discussion of Hellenistic drapery style interesting in a quite different way from that of

her predecessors. The word "rococo" begins to sound with increased frequency here, not only for the draped ladies but also for semi-draped Aphrodites found in or around Rhodes. Before we turn our attention entirely to this aspect, however, there is a section on late baroque in the first century B.C., comprising the Farnese Bull and the Laocoon.

In Chapter X, "Rococo Trends in Hellenistic Art," few limits of time or space are set. Rococo is defined as the light and playful side of Hellenistic art, and the author warns against using it as the name of a period: "There is no doubt that in ancient art this rococo trend began in the early third century and lasted through all the following periods, including the Roman." To suggest what is included, her own words will serve best: "The main subjects of rococo art are children, male and female adolescents, and old men and women. All these ranged from the higher classes to the lower groups living on the sidewalks of the capitals or in rural districts—peasants, fishermen and shepherds—down to caricatures. The lust for life is expressed in satyrs, maenads and pans. Among the gods Dionysos, Aphrodite and Eros became the favorites of an era which enjoyed song, dance, wine and love." It should be added that the so-called "Hellenistic reliefs" and some figures of animals are discussed in this chapter.

"Classicism in the Second and First Centuries B.C." is Chapter XI. The copying and collecting activities of the Attalids are referred to briefly and the work of Damophon described. The Aphrodite of Melos, the Poseidon of Melos and the "Hellenistic Ruler" in the Terme are offered as examples of eclectic classicism from the middle of the second century. The author sees a return to the style of Lysippos as one of the elements in classicism in the late second century and attributes to this trend the Borghese Warrior (placed around 100 B.C.) and the portrait of Poseidonios.

The frieze from the temple of Artemis at Magnesia on the Maeander is called classicizing because it borrows groups from fifth-century Amazonomachies. The frieze of the Temple of Hekate at Lagina prompts the comment, "Greek art was on its way down." The chapter ends with two late Hellenistic statuettes in Athens that conclude the plates with an appropriate dying fall. Summing up in Chapter XII, the author stresses not only the intrinsic greatness of Hellenistic art but also its essential continuity with that of the Romans, which "emerged as an unbroken continuation of Greek art."

The lively interest of Hellenistic artists in humanity, "man . . . seen against his background and among his surroundings," makes the period a particularly sympathetic one to Dr. Bieber, and it is doubtful whether any one else could have presented this most vital aspect of its achievement to us with greater warmth and depth of appreciation than she. The sections on portraiture are especially full and rewarding. One might guess, if he did not already know, that these sections were originally parts of a separate book

on portraits. We may regret the loss of continuity that they have suffered in being partitioned here among the various periods and schools, but the picture of Hellenistic sculpture in the present work is much enriched by the large number of fine pieces illustrated and especially by the many reproductions of the powerful portraits on coins.

The chillier pastimes of working out morphological series and squeezing absolute dates from excavational and epigraphical evidence attract the author less, and she offers little that is new along these lines, though she dutifully records most of what has been done in the past, and her notes, bibliography and chronology contain a wealth of valuable information. The few serious omissions belong mostly to recent years and are not hard to track down elsewhere. Some have already been mentioned in other reviews, and a few more will be noted below. In matters of opinion, one suspects that no two reviewers will agree on where to disagree. Nevertheless, the range of the work is so broad that any reader is bound to have opinions of his own on some of the things treated, or at least to feel in places that a view contrary to the author's deserves more attention than she has given it. The following are a few such points that strike the present reviewer.

The heritage of the fifth century which continued down into the fourth is presented (pp. 9-14) as consisting of three separate trends: "the majestic art of Pheidias," "the academic perfection of Polykleitos" and "a third trend . . . which we might call manneristic." A student unacquainted with late fifth century art would get no inkling here of the absolute interpenetration of these three. The "manneristic" style is a direct outgrowth of the Parthenon style with intermediate links preserved in the fragments from the "Altar of Ares" in the Athenian Agora (*Hesperia* 21 [1952] pls. 22-23) and the exquisite remnants of the reliefs from the base of the Nemesis at Rhamnous (it is a little startling to find Agorakritos listed as a representative of "the contrasting style," i.e. sober "Pheidian" grandeur). Furthermore, Polykleitos' formula of chiasmic balance was taken over enthusiastically by Attic artists who worked their drapery in the delicate "manneristic" style (cf. the "Venus Genetrix," inseparable from the Nike Temple Parapet), while the sculptors of the Argive Heraeum (Polykleitos' home territory) made the Attic drapery style their own. The fifth-century Nike, identified by the excavators of the Athenian Agora as a corner akroterion of the Stoa of Zeus, is surprisingly bracketed by the author with the Epidaurios temple sculptures, and it is suggested that the figure may have stood in the pediment of a fourth-century temple. This last is just a mistake; there is no doubt that the Nike was an akroterion. The controversy about the meaning of *typoi* in the Epidaurios accounts is straddled by taking it to mean "models, probably in the form of reliefs." This is neat, but not very plausible. J. F. Crome, *Die Skulpturen des Asklepiostempels von Epidaurios*, Berlin 1951, should be added to the references.

The statement that the Eirene of Kephisodotos stood on the slopes of the Areopagus (p. 14) continues to crop up in books on sculpture although its only basis was an old erroneous location of the Agora itself. The route of Pausanias indicates that the statue was in the Agora, and so not on the hill at all (cf. *The Athenian Agora, a Guide to the Excavations*, p. 86, fig. 14). For the career of Kephisodotos, as for several other sculptors, reference may now be made to J. Marcadé, *Recueil des signatures de sculpteurs grecs*, Première Livraison, Paris 1953.

The head of Apollo in the British Museum (fig. 72) labelled "Hellenistic head" must surely be a copy made in the second century A.D. Compare the carving of the eyelids, eyeballs and canthus with those of the copy of the Apollo Lykeios in fig. 22.

In outlining the life of Lysippos, the author does not take into account the Pelopidas base found at Delphi in 1939 (Bousquet, *RA* 14 [1939] 125ff; Marcadé, *Signatures* I, 66) which must have held a dedication made shortly after 369 B.C. or, less probably, just after 364. Since this compels us to start the career of Lysippos in the decade 370-360 anyhow, it hardly seems worthwhile to argue for any considerable delay in the erection of the monument of Troilos who was victorious at Olympia in 372 B.C. Dr. Bieber states that the Troilos dedication has been dated about 360-350 B.C., but there is no evidence except the letter-forms, and few epigraphists will commit themselves to so close a dating on letter forms in a fourth century inscription. The statement that Lysippos must have been born about 375 B.C. (p. 31) can therefore hardly be true. In the Daochos monument, the figure leaning on a herm described by the author as Age-las, the younger brother of Agias (p. 33) is now called Sisyphos II (Will, *BCH* 62 [1938] 299f).

The discussion of the Girl from Anzio, presented as the original *Epithyousa* by Phanis, the pupil of Lysippos, might have included at least a reference to the opinion, persuasively advanced by Rhys Carpenter in *MMAR* 18 (1941) 70-73, that the statue is a Roman copy of an original creation in bronze. Jocelyn Toynbee now takes still another stand, that the statue is an original, but of late Hellenistic or Roman date (*JHS* 76 [1956] 130). This reviewer is inclined to side with Carpenter here. The composition, which is so elaborately thought out and so consistent with the developed Lysippan formula, does not strike one as the work of an eclectic classicist, whereas the surface treatment of the dress seems definitely a copyist's mannerism. Something very like it is used as a standard formula in copying the crinkly thin drapery of fifth-century figures, whether their originals were in bronze or marble. For the fact that the original of the Anzio girl was in bronze, Carpenter's arguments from the lifting and undercutting of the hem of the skirt and the assembly of small objects on the tray, easy in bronze but awkward in marble, are rather convincing. In general, it seems best to stick to such structural arguments when one is trying to determine whether

a lost original was in marble or in bronze. Some Hadrianic sculptors, for example, were so fond of a bronzy surface effect that they even introduced it into original portraits in marble (cf. especially a bust in Athens, N.M. 420, German Inst. Phot. 124, *ÖJh*, 21/22 [1922/24] 175, fig. 58), and one suspects that copyists of this time would have used such effects independently of their models.

The bronze head of a bearded boxer from Olympia (fig. 144) is used by Dr. Bieber to illustrate the kind of results obtained by Lysistratos, the brother of Lysippos, from his newly-invented process of taking plaster casts from actual faces. This is hard to see. The taut structure and strict symmetry of the bronze head, the sharp edges of the eyebrows, the simple planes of the cheeks and the hard curve of the lower lip owe nothing to the accidental forms of a living face. In its technical aspects this head seems, if anything, to hark back to fifth-century ways of working. The projecting locks with their strands delicately rendered in cold engraving seem descended from the curls in front of the ears of the Delphi charioteer. May we not imagine that the wind-blown beard of Demetrios' Corinthian general (p. 42) was treated in much the same way? Without insisting on the identification of this head with the Satyros of Silanion, one may still dispute the author's judgment that "the head shows a realism that is too advanced for Silanion."

Students who want to cut their teeth on a classic controversy will find Dr. Bieber's undiluted presentation of the "Menanderite" position (pp. 51-54) extremely useful, but they will do well to look up the references to "Vergilian" literature given in note 112 rather than content themselves with the author's one-sentence refutation: "The explanation for this mistake of eminent scholars is the fact that some copies have features of contemporary classicizing art." G. M. A. Richter has now given a new summary of the question in *Catalogue of Greek and Roman Antiquities in the Dumbarton Oaks Collection* (Cambridge, Mass., 1956) pp. 4-10.

The drunken old woman in Munich and the Capitoline is included under "Asianism" in the discussion of pyramidal groups of closed form belonging to the third century. Its attribution to "Myron of Thebes," whose name occurs at Pergamon, is taken as certain. Carpenter's discussion of the Pergamene inscription and its companions (*AJA* 58 [1954] 4-6) deserves serious consideration without reference to the Hermes controversy in which it is unhappily imbedded. It suggests that Myron of Thebes may not have been a Hellenistic sculptor at all. The juxtaposition in figs. 283-284 of the old woman with the Gaul and his wife points up clearly the difficulty of making the two works contemporary. The discrepancy between the upper and lower parts of the old woman is almost as great as in the old market woman in New York (fig. 590) and points to a period more blatantly eclectic than the late third century seems to have been. It is hard to see how a terracotta mould with the motif of

the drunken woman found at Pergamon (p. 81) helps to prove that Myron worked there, for the original old woman is said to have been at Smyrna. More than once in Dr. Bieber's book, the occurrence in a given locality of small works (marble statuettes, terracottas or small bronzes) in a given type is taken as evidence for the localization of the original on which the type is based. This is dangerous unless the type occurs in really significant numbers (so many that one wearies of cataloguing them) in one place and is at the same time poorly represented elsewhere.

The small bronze rider wearing an elephant skin (fig. 298) has now been acquired by the Metropolitan Museum of Art in New York (no. 55.11.11).

For a well-known head in Copenhagen wearing a rolled fillet (Ny Carlsberg Glyptotek, no. 455) Dr. Bieber offers (p. 87) an identification with Antimachos of Bactria made by Janet Hawke on the basis of the coin portraits. This (ca. 185 B.C.) is the earliest date the head has had yet, though it has wandered widely. F. Poulsen named it Attalos III; V. Poulsen has significantly omitted it from his *Les portraits grecs* (Copenhagen 1954); E. Buschor refers to it as "kaiserzeitlich" (*Das hellenistische Bildnis*, Munich 1949, p. 35—this book deserves a place in the general bibliography under "Portraits"). The headgear alone could be the subject of a many-sided controversy if Miss Hawke's identification were to find acceptance. The "Antiochos III" in the Louvre (figs. 319-320) seems to me equally troublesome as a middle Hellenistic portrait, especially when we compare it with the coin on which the identification is based (fig. 321). (On both heads cf. now Vagn Poulsen, *Gnomon*, 1955, p. 588.)

In the chapter on Alexandria the author compares the fragment of a half-draped seated male statue in the Alexandria Museum (Adriani, *Documenti e ricerche d'arte alessandrina* I, pls. A, 1-111) to the seated Dionysos from the Thrasyllos monument in Athens, and lists it under "Early Development." This seems to me to do an injustice to the richly baroque drapery of this fine piece, which Adriani has convincingly placed in the first half of the second century (*ibid.* pp. 24-25). The fact that the left lower leg emerged nude from the drapery will have added to the restless effect of the whole, so different from the heavy simplicity of the Dionysos. Dorothy B. Thompson points out an ambiguity in the discussion of two statuettes of queens holding cornucopias in New York. The text (p. 92) mentions one inscribed with the name Cleopatra and one uninscribed. The captions to figs. 351-353 do not indicate which of the two is illustrated and one might guess from the sequence that it is the Cleopatra. Actually it is the uninscribed statuette.

Dr. Bieber accepts the stiffly decorative head of Asklepios from the baths of Caracalla (fig. 423) as a copy of the cult statue of Asklepios created for Pergamon by Phryomachos of Athens and says: "The head distinctly combines Attic tradition with the beginning of the 'baroque' style which was to become characteristic of the Pergamene school." L. Curtius seems closer

to the mark when he derives the head from Antonine creations remotely based on a fifth-century type (*Zeus und Hermes*, 35-36). N. Kondoleon points out to me that the marble statue of a fighting warrior from the Agora of the Italians at Delos (fig. 422) cannot be connected with Nikeratos. The signature of Nikeratos belongs to a long base in front of the temple of Apollo which carried bronze statues (Leroux, *BCH* 34 [1910] 488). The warrior is attributed by Picard to Agasias, son of Menophilos (*BCH* 56 [1932] 492ff). It is unlikely that the head (figs. 420-421) belongs to the warrior (Picard, *op.cit.* 503). Of the knife-grinding Scythian in the Uffizi (figs. 441-42) Dr. Bieber says: "This might even be the original," but surely it is, as Amelung said, a copy.

The chapter on Rhodes derives much of its substance from things whose connection with that island is tenuous at best, and one leaves it with the impression that for sculptors Rhodes, like Athens, was a good place to be from. The type of the standing Hermaphrodite (fig. 492) is represented by an excellent full-sized statue of indubitable Pergamene style from Pergamon itself and only by a statuette from Rhodes. In giving the original to Rhodes the author is apparently influenced by her belief, expressed elsewhere (p. 147) that "scholarly and sober Pergamon" was not interested in such sensuous subjects. There are, however, two herms of Hermaphrodites from Pergamon (*Altertümer von Pergamon* VII, 2, nos. 257-58) and three seems a fairly high score, as Hermaphrodites go.

For the Nike of Samothrace we still await the full report of the American excavators on the architectural setting of the Nike and the contemporary structures on the western hill, but it is perhaps significant that the guide to the excavations (Lehmann, *Samothrace*, New York 1955) makes no mention of Rhodes. In any case, as Miss Toynbee rightly says, the attribution of the statue to Pythokritos of Rhodes cannot be called certain (*JHS* 76 [1956] 131).

The author explains clearly the difficulties in identifying the muses on the Apotheosis of Homer relief by Archelaos of Priene with the muses by Philiskos of Rhodes that stood in the Portico of Octavia in Rome, but this identification is the only thing that links the relief with Rhodes. The elaborate transparent-himation style in draped female statues of which the muses furnish examples is adequately represented in works from Rhodes and Cos, but all the finest pieces are from the mainland of Asia Minor, and they are not even confined to the southwestern part, as one may see from Dr. Bieber's plates. It is surprising to find the most delicately worked and realistically textured of the statues from Magnesia on the Maeander (fig. 520) dated so late as the first century B.C. On the other hand, the statue in the Louvre (fig. 519) looks altogether out of place in this company. The upper part suggests a first-century A.D. imitation of late Periclean style.

The chief objection to the chapter on Rococo is that since Rococo is not a style but a mood, or rather a

variety of moods, the works treated here are uprooted from their rightful contexts of type, time and place, and so made harder rather than easier to understand. It would have been much more useful, for example, to have all the Aphrodites together (however that might detract from their charm) than to have them sprinkled about, with a single type, such as the sandal-binder, split between Alexandria and Rococo. Some late Hellenistic portraits of old men seem to have got into the Rococo chapter for lack of anywhere else to go. It is of course difficult to treat late Hellenistic portraits in a work that does not make the transition to the Roman period. G. Hafner's *Späthellenistische Bildnisplastik* (Berlin 1954) now helps to fill this gap.

In her chapter on classicism Dr. Bieber follows Krahmer in placing the "Hellenistic Ruler" beside the Poseidon of Melos in the middle of the second century. She does not call attention to the strong Polyclitan influence in its pose and the proportions of the torso (exaggerated development in depth). This return to the square form makes the statue fundamentally different from the Poseidon, which, like late Hellenistic groups, is designed for the front view. The head of a man from Delphi (figs. 692-93) is rightly recognized as a classicizing work, but I doubt that it belongs to the second century B.C. The surface technique, the flanged eyelids, and the way of indicating the light beard by little strokes that seem to cut into the flesh suggest that this is an exceptionally fine work of the Hadrianic period. It is hard to decide whether it is a copy of a fourth century head or an original portrait of some one who chose to be portrayed in the classical manner.

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CATALOGUE OF THE TERRACOTTAS IN THE DEPARTMENT OF GREEK AND ROMAN ANTIQUITIES, THE BRITISH MUSEUM, Volume I, Greek: 730-330 B.C., by R. A. Higgins. Pp. viii + 432, plans 3, pls. 208. The Trustees of the British Museum, London, 1954. £15-15-0.

The delay in the appearance of this review is deeply to be regretted. Nevertheless, in the interval Mr. Higgins' work will have proved its merit to many readers. It represents the first instalment in a systematic republication of the terracotta figurines under the charge of the Greek and Roman Department of the British Museum, thereby superseding the earlier and now outmoded catalogue by H. B. Walters. Also, and quite incidentally, thanks to a painstaking attention to detail and a sound differentiation between fabrics, Mr. Higgins' first volume constitutes the most thorough and comprehensive treatment of archaic and classical Greek terracottas yet attempted. But it is not exhaustive. That would be too much to expect of any

catalogue or, for that matter, any single collection.

A short introduction deals generally with technical matters and the development of Greek terracotta figurines. The observation of the Museum Research Laboratory (p. viii) that the white slip usually underlying the "matt" pigments was applied before firing is further supplemented by those pieces (most commonly, but not exclusively, plastic vases and vase protomai) where the edge of this white slip is itself overlaid by black "glaze." But the statement (p. 10) that there was a break in terracotta production between the end of the Bronze Age and the late eighth century B.C. seems hardly reconcilable with the established facts (cf. *AM* 65 [1940] 57ff, *Jdl* 58 [1943] 183ff). In several parts of the Greek world the uninterrupted production over this period of large wheel-made votive animals, especially bulls and horses, and human cult idols, is now well attested. Further, the introduction of the mould (p. 11) would seem to antedate the emergence of the so-called "Dedalic style," *inter alia*, on Mr. Higgins' own later statement (cf. pp. 157ff—its earlier employment on Middle Minoan pottery apparently found no survival).

In the catalogue that follows the material is classified according to the several fabrics represented in the Museum. Although occasionally these divisions may seem somewhat wide, in general this arrangement has been masterfully handled. Such suggestions as I have here to advance are not based on a re-examination of the material but simply on the information contained in the catalogue itself. Occasionally they may be wide of the mark. They are limited to the range of fabrics identified. I would, however, suggest that no. 677 may be rather a local imitation of Attic work such as is found in Bocotia. Further, if their technique is correctly described, nos. 667-68, 691-95 and 707 may be Rhodian imports rather than Attic imitations of them; the latter are common enough, but, although no hard and fast rule is possible, they are more usually solid. Likewise, nos. 800, 817-19, 834, 835-37 and 839 may also hail from Rhodes because of the distinctive treatment of their undersides, although it must equally be remarked that the series of no. 799, closely akin in technique, is not yet attested outside of Bocotia. Nos. 923 and 987 may also be from Rhodes.

The "derivative" pieces (see *BSA* 47 [1952] 221) have been entered under the fabrics in which they occur, not those from which they have been derived. This is probably the simplest solution to an ever-vexed question of arrangement. The origins of such pieces are usually clearly indicated in the text, but nevertheless the following somewhat arbitrary list may spare the reader a measure of perplexity. *Rhodian-derived*: nos. 344, 350 (?), 353, 358, 367-70 (?), 372 (?), 442 bis (?), 443 (?), 490-93 (?), 546, 562-63, 650 (?), 652-54, 669, 672, 801, 811-12 (?), 833, 838, 840 (?), 841, 1061-62, 1068, 1098 (?), 1121-22, 1123 (?), 1124, 1156-59 (?), 1420-21 (?), 1443, 1444-45 (?); *Attic-derived*: nos. 223, 804, 813-14, 884-85 (?), 1148 (?), 1411-15, 1417 (?), 1429 (?), 1442, 1475, 1497 (?), 1498-99 (?),

1515 (?), 1519 (?), 1521 (?), 1529, 1530 (?), 1532 (?); *Corinthian-derived*: nos. 798, 978 (?), 1522 (?); *Boeotian-derived*: 988, 1422 (sub-Attic); *Locrian-derived*: 1119 (?); *Tarantine-derived*: 1434; *Sicilian-derived*: 1450-51 (?), 1452-56, 1470-73, 1492-93 (?), 1494-95, 1504-05, 1506ff (?), 1516-17.

The other mechanical relationships (cf. *BSA* 47 [1952] 219ff), apart from identity of moulds, are less adequately indicated. The approximate scales quoted on the plates (occasionally misleading, e.g. pl. 199, no. 1460) are usually insufficient to determine the "generation" to which a piece belongs. So, too, in the case of the smaller or fragmentary examples, are the figures for the total or preserved height given in the text. As some of this material displays highly complex internal relationships, a short appendix analyzing these from both a mechanical and a stylistic viewpoint would prove a boon to the specialist. Might one suggest that such be provided with the next volume in this series?

Within the fabrics the material is arranged chronologically in units of a third of a century. This makes for great clarity of treatment and is more than adequate to the purpose—indeed at a number of points it actually overtakes present chronological knowledge and many new proposals are made as a consequence. Nevertheless, it is somewhat vexatious to find pieces of the same series squeezed into more than one of these rather large watertight compartments. A more satisfactory solution would seem to be to enter the whole series in the period in which it is presumed first to have appeared and there to state its probable duration in production—often considerably more than a third of a century. The dates given are arrived at partly from stratigraphical data, especially tomb groups, and partly from purely stylistic criteria and these two methods seem sometimes at variance. Where the stratigraphical data are plentiful, as with the Rhodian material of the fifth century, the chronology offered tends to show a considerable advance over anything previously attempted; where, however, the tomb groups, etc., are inadequate, as with the earlier Rhodian material (see below), the dating sometimes errs somewhat on the low side. The stylistic dates advanced, on the other hand, tend to be high. This is often noticeable with the later classical material.

Of the different fabrics distinguished, the most important as here presented is the Rhodian. The reconstitution of many of the tomb groups and other contexts excavated by Salzmann and Biliotti at Camirus (pp. 21ff) has produced a great deal of fresh dating evidence for Rhodian terracottas—in the fifth century B.C. as great a contribution as that made by the whole series of *Clara Rhodos*. It seems, further, that the records of the excavations of 1863-64 may be pertinent to other fields as well. Thus, do Plans 2 and 3 indicate the presence of a monumental seventh century podium-temple such as recently excavated at Old Smyrna?

My own observations have suggested that the ear-

lier terracottas of Rhodes belong to several distinct fabrics. An even non-micaceous cream clay, occasionally firing pink, seems to be localized to Ialysus by an unpublished early *stipe votiva* from that site (in Rhodes Museum—incidentally, pieces such as nos. 5 and 5 bis are Ialysan or under Ialysan influence; likewise probably Maximova's "Pomegranate Group," itself more extensive than she allows). The local derivatives from the Danish excavations at Lindus seem to suggest that the native clay there was usually of an orange variety with fine grains of "silver" mica. Two distinct clays appear to be localized to Camirus, although here there is less certainty: a coarse, gritty, brown, virtually non-micaceous, "pithos-type" clay especially common in the seventh century, and a hard, brown clay containing abundant and roughly equal amounts of "gold" and "silver" mica.

Two conflicting accounts are given of the dating of Maximova's "Gorgon Group" plastic vases (cf. pp. 11 and 19—these are vital to any terracotta discussion and the British Museum examples are now, I gather, to be covered in a special supplementary catalogue). Actually they probably begin about the end of the seventh century. Although primarily Camiran in fabric, they seem, in the case of the characteristic female-bust vases, to show contact with the Ialysan tradition of the later seventh century. However, to assert (p. 19) that scent bottles simply superseded votive terracottas in Rhodes for a considerable period of time seems hardly reasonable. Actually, over most of East Greece the importation of Cypriot figurines and even statues of terracotta increased enormously in the second half of the seventh century B.C. By 600 B.C. it was at its height and was virtually driving many local fabrics from the market. The Rhodian monopoly in Ionia later in the sixth century probably followed in the wake of this Cypriot one.

Pieces such as nos. 40 and 41 surely still belong in the seventh century. Then comes the *lacuna* representing the Cypriot monopoly. Thereafter, vases and figurines of the emergent Rhodian matt-painted variety are sometimes dated rather low on the evidence of an insufficient number of tomb-groups often emphasizing the end rather than the beginning of a long derivative production. Thus it seems worth remarking, for example, that the piece at Corinth referred to under no. 75 forms part of a published tomb-group of rather earlier date (*AJA* 33 [1929] 542ff, figs. 20-22). A seated figure from a recently published well-group at Corinth (*Hesperia* 24 [1955] 374 no. 102) is also significant.

The Rhodian material spanning the fifth century is especially rich. Its variety and inventiveness down to the third quarter of the century are as remarkable as its abrupt decline thereafter. Only two pieces (nos. 285, not clear in the photograph, and 295) might possibly post-date the synoecism, but not necessarily. Nos. 127 and 132 show Attic affinities. Nos. 233 and 234 perhaps rather portray the daily chore of grinding corn with a quern whilst nos. 237ff apparently offer a long run of derivative and parallel production.

The British Museum collection of Halicarnassian material is richer than any other. A distinctive local fabric is recognized, although, in its earlier stages at least, it overlaps with the Coan. The more developed material from Newton's Votive Deposit (pls. 57-69) shows a sheer delight in massing folds of transverse drapery. It also shows a number of internal relationships (cf. nos. 382-85, 408-19, 433-41, 446-51, etc.). One may indeed be led to question how far this material with its striking drapery treatments should be spread over a period of a century and how far the bulk of it represents the creation of a relatively few able hands working over a shorter period.

The remarks about the dating of the earlier material from Samos (p. 142) do very scant justice to the stratification of the German excavations, apparently implying that not only the seventh century vases but also those of the protogeometric and geometric periods should be down-dated to the seventh and sixth centuries!

The detailed republication of the early Ephesian material is most welcome. No. 537 is an important piece, especially in view of its relations with the wheel-made Ialyan statuettes. But it is quite inaccurate to assert that wheelmade figurines did not begin until the end of the seventh century. No. 542, also, is surely still in the late seventh century and the wild goat bowl with which no. 543 is compared dates to the last quarter of that century. An early sixth century dating for no. 544 is probably about right. Perhaps it is more likely to have formed part of a wheelmade statue than of a vase.

By contrast, a high dating is used for the Cretan material, perhaps excessively so in the case of nos. 582-84, since the facial contours of this series show affinities with other Cretan reliefs of rather later in the seventh century. The sixth century pieces, especially no. 592, form a welcome addition. In view of its size, no. 606 might possibly be from a wheelmade votive bull.

A slightly lower dating for the Melian reliefs is proposed on the strength of one of the newly reconstituted Rhodian tomb-groups (p. 165). Although, as we have seen, undue stress cannot be placed on isolated contexts in the interests of *lowering* dates, if we may judge from the lovely Parian examples discovered by Professor Rubensohn, there may indeed be a faint element of conservatism in fifth century Cycladic terracottas.

The early Attic material (pp. 171ff) does not constitute a single homogeneous whole. Nos. 646, 648-54 belong to a class unattested in excavations in Attica apart from a modern dealer's dump in the Athenian Agora (they are still common on the market in Athens). The provenance of the majority of the British Museum and Louvre (S. Mollard-Besques, *Cat. Raisonné des Figurines et Reliefs en terre-cuite grecs, étrusques et romains* I nos. B 16-50) specimens seems clearly to imply that the production centre was Megara. This Megarian fabric, then, is in a clay quite like the

Attic. It is predominantly derivative (cf. nos. 653 and 654 with nos. 121-23; the derivation of no. 648 is unknown, but perhaps East Greek; no. 646 may be a local Megarian creation, but it shows affinities with Argive and east Arcadian work).

In the case of no. 647 the reviewer may unwittingly have misled the author somewhat. The derivation of the heads of this piece and its twin in Brussels (Musées Royaux du Cinquantenaire no. A2676) is still a vexed question. Although some technical details seem Attic, the painting and the kind of red pigment used seem more likely in Boeotia. As the author himself seems to recognize (p. 175), but not to allow for in his dating, the series, for example, to which nos. 655 and 656 belong begins production in the late sixth century. The later classical material here attributed to Attica constitutes a fairly consistent lot. A few of the assignments made, however, though attractive, still lack confirmation due to the paucity of surviving material.

The time has not yet come when specialized study can distinguish the rise and fall of individual production centres over the great area dedicated to terracottas loosely designated as "Boeotian." However, the author follows the conventional broad delineation of the fabric impeccably. Poloi such as no. 781 are perhaps rather to be seen as symbolizing the deification of the dead. One might expect them more usually to be made of less permanent materials and perhaps actually to be placed on the head of the corpse (cf. the plaque MMB N.S. I 84 fig. 6).

The Corinthian material presented is admirably arranged with the exception of the plaque, no. 902, which is, as already pointed out by Mustilli (*Annuario* 15/16, 234), probably not Corinthian, but one of the numerous class of painted Lemnian cut-outs. Of the Argive pieces, no. 978 looks as though it might perhaps be rather an attachment from a sixth century B.C. bowl (cf. *Hesperia* 21 [1951] 185 nos. 133-34, pl. 49; *BSA* 48 [1953] 47 no. 31, fig. 22, pl. 23).

The Cyrenaican fabrics were predominantly derivative. Our inability, as yet, often to distinguish the source of these derived specimens is perhaps rather a measure of the limitations of our knowledge of the sum total of Greek fabrics. One tentative suggestion that I have to offer is that some of the more mystifying of the protome fragments such as nos. 1483 and 1484 seem to find their closest parallels in the more southerly Ionian Islands.

The photographs are for the most part of fine quality, although a few fall below the high standard set (e.g. pl. 196 no. 1429 and pl. 204 no. 1510). The text is a model of clarity. Tables at the end provide concordances between Walters' numbers, those of the present catalogue and the Museum inventory serials.

Despite careful checking there are some misprints. The following may cause confusion: p. 29, Tomb 206, for date "610-590" read "510-490"; p. 64, for catalogue no. "19" read "119"; p. 230 no. 864, for "490-450 B.C." read "390-350 B.C."; p. 269 no. 979, for "standing"

read "seated"; p. 320, under no. 1184, for "183" read "1183."

I trust that the many details considered here will not obscure the two salient points: this is easily the best book ever written on Greek terracottas of this period and it is to be hoped that its appearance heralds the beginning of a new era in the publication of catalogues of such material.

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LONDON

CORPUS VASORUM ANTIQVORVM. Louvre fasc. 11 (France fasc. 18), by *François Villard*. Librairie ancienne Honoré Champion, Paris, 1954.

The eleventh fascicule of the Louvre *CVA* contains Attic geometric kraters, Attic black-figured amphorae, neck-amphorae, and hydriai. These four categories of vases had already been well represented in the Louvre, but have recently been notably increased through the rediscovery of items in the storerooms, where for years they had remained forgotten. The publication of these recent finds lends this fascicule a very special interest. The author has proved himself a learned connoisseur of Greek vases through a number of excellent articles. He did not find the material ready-made in the museum but was compelled to prepare it himself, with the tedious work of sorting and joining the fragments. We therefore owe him even greater thanks than to an ordinary author of a *Corpus* fascicule, thanks which should be expressed at the very outset of this review.

In comparing the latest Louvre fascicule with the first which appeared over thirty years ago, the great progress achieved in one generation in the presentation of the material will be properly appreciated. Of the four desiderata which were once, on the occasion of the first fascicule, voiced by the most competent critic (*JHS* 43 [1923] 198f) the present fascicule—like some of its predecessors—fulfills no fewer than three. One regrettable disadvantage, however, has persisted throughout the entire French *Corpus*. Now as before the backgrounds of the photographs on the plates have been cut out. This diminishes the three-dimensional effect of the vase-shapes, falsifies the contours, and makes the pictures appear as if pasted on. One looks in vain for a reason why this antiquated and ugly method is kept, a method which fortunately is less and less imitated in the fascicules of other countries. The photographs, as such, are good and the collotype is above reproach, though the small scale of the reproductions is in many cases regrettable. This is especially true for the geometric kraters and fragments; here the severe reduction does not do justice to the monumental character of the funerary vases nor to the size of their figured decoration. Not uncommon in this section are plates with many small, even minute pictures which float in the large empty space. This space could have been put to

better use, even if the number of plates itself could not have been increased. Particularly in the case of the fragments, the exaggerated reduction does not always afford a satisfactory view of the style, and makes it that much harder to attempt joins with pieces in other museums. With the black-figured vases we are better off, yet even here one would complain that so important a work as the amphora by Lydos (III H e, pl. 125), now fortunately grown to quite a big complex, has been somewhat niggardly treated to only one plate.

The Attic geometric style makes its first appearance in the *CVA* of the Louvre with the sixteen plates of this fascicule (III H b, pls. 1-16). The publication of the funerary kraters, of which the Louvre now probably possesses the richest collection, is the more valuable, since most of the pieces which had been known before have now been placed in a new context through more or less extensive joins. Many years ago the reviewer was able to join several fragments of the old collection and to connect them with fragments in the National Museum at Athens. But it was only recently that he reported on this; and these reports are published in *EphArch* (1953-54) 162ff and in *Neue Beiträge zur klassischen Altertumswissenschaft, Festschrift Bernhard Schweitzer*, 48ff (here abbreviated, respectively, *E* and *F*). The following remarks are in part based on these articles.

The well-known krater A 517 (pls. 1 and 2, 5) has now been freed of old plaster restorations. The most important augmentation is the piece with the lower left-hand corner of the shoulder-picture (pl. 1, 3), which completes the composition. The three figures here do not correspond to the two figures at the right end of the picture, in agreement with other departures from the rigid symmetry observed elsewhere (cf. *E* 169, note 5). The attribution of pl. 1, 2 to the shoulder picture of the reverse rests on the certainly wrong hypothesis that the representation of the prothesis is repeated. The fragment probably belongs to the zone of the chariots, or else would have to be left out altogether. Two fragments in Athens with parts of a ship with oars perhaps belong to the region of the left handle which is missing in the Louvre (*F* 55, note 26). It would be tempting to attribute the fragment pl. 9, 6 to the upper right corner, were it not unglazed on the inside.

Plate 2, 1-4, 6, and pl. 3: here the upper part of krater II (discussed in *E* 164ff) is connected with the lower part of krater III (*E* 166f), though there are no joins. New connecting parts (pls. 2, 2 and 3, 7) now make certain the assumption that *E* pl. 4, 1 (above) belongs to the upper zone of the shoulder. Villard places in its lower zone the fragment of a ship which unfortunately has remained isolated (*E* pl. 4, 1, below on r. = *CVA* pl. 3, 7 on r.). The fragment with a ship on pl. 3, 8, however (= *E* 165f; pl. 4, 1, below on l.) differs in the number of the upper dividing lines and in its measurements and should not have been assigned by Villard to the other side of the same krater, since it cannot be put in a picture of a prothesis, which is

essential for the main side of the krater. It therefore can only belong to the reverse of a companion piece, the obverse of which is in fact preserved: pl. 4, 3 (= *E* 163ff, krater 1). The new fragments pl. 3, 2-6, which hardly belong to a prothesis, must therefore for the same reason either find a place in the right half of the reverse, or in the reverse of the companion piece, our krater 1, but the illustrations do not permit a decision. Now, for the connection in plaster of the upper part with the lower part, called incontestable by Villard: I still believe that the lower part is that of another krater. The poor, sagged shape, which is the result of this combination, does not speak in its favor. The chariot frieze, moreover, gets up much too high and, finally, a glance at pls. 2, 2 and 3, 9 shows that the upper parts of the chariots cannot be made to correspond with the wheels and the legs of the horses. This connection has to be given up; below the krater is preserved only down to the chariot frieze. The real height of the latter is given, or rather was given, by the big fragment A 523 (pl. 5, 10; *E* 165, pl. 3, 2) with the lower right corner of the picture of the reverse and the adjacent handle area, a fragment which Villard, unjustly I believe, does not connect. The fragment has now been augmented at the right end, but has lost the fragment with the horses' hoofs, formerly attached to it below (cf. *E* pl. 3, 2), which gave the height of the chariot frieze, but is nowhere figured in the *CVA*. The fragment with the chariot frieze which I attributed with a query to krater 11 (*E* 166, pl. 4, 4) has been put in *CVA* pl. 4, 3 in our krater 1; perhaps rightly so, although it does not join anywhere and certainly does not belong in this place. Of the prothesis on the obverse we still do not have any certain remains. The fragments pl. 10, 30 and 31 are undoubtedly by the same hand and could be considered as candidates, but I would have to see them myself to make up my mind. See also my comments on pl. 10, 15 and 18.

Plate 4 and pl. 5, 1-6: the krater 1, put together in *E* 163ff, is now augmented by important pieces of the right handle, newly joined (compare pl. 4, 3 with *E* pl. 2, 2) and, above all, by the lower part (pl. 4, 2-6 and pl. 5, 4) which reaches almost to the beginning of the foot. The connection is certain thanks to an immediate join. Thus the conjectures about the decoration of the lower part which were voiced in *E* 168 can now be disregarded. The three lower ornamental zones already appear in the same sequence on the krater Athens 806 (*AJA* 44 [1940] pl. 25). They suit excellently the early date (assumed in *E* 169) for krater 1 in the series of classic funerary kraters. The fragment of the chariot frieze which was formerly a floater (*E* pl. 4, 2) has now found its secure place below the right handle (*CVA* pl. 4, 3). The small fragment (pl. 4, 1) shows the upper right-hand corner of the right handle area (cf. also pl. 9, 13 and pl. 10, 33).

Plate 5, 7-9: the familiar big fragment A 519 with the most extensive battle picture in the geometric style which is preserved in its context, though alas not

completely. An important addition is the fragment in New Haven, which Villard recognized as belonging and illustrates in the text. Two small fragments from the procession of warriors in the Louvre have been added, which likewise do not join. Villard rightly stresses the close stylistic connection with the complex Brussels (ex Louvre A 531) and Athens (now published in *F* 49ff, pl. 4; for additional material see also *F* 52ff, where on pl. 9, 1 the Athenian fragment of a counterpart to A 519 is published). The "torse rectangulaire" of some of the warriors should be taken as a shield, as shown by the representations (e.g. Lorimer, *Homer and the Monuments* 161, fig. 14). Much is to be said for the explanation of the rectangular rest at the right end as a chariot, from which the big warrior has fallen which Villard, as far as I know, is the first to give.

Plate 5, 10 (A 523): see above on pl. 2, 1-4.

Plate 6: the lower part of a krater of which floaters of the lowermost frieze have been found. A fragment in Athens belongs (*F* 50, note 12). For the style compare *F* 56. The fragment of a battle-scene there mentioned (A 555) is taken by Villard (pl. 8, 10) not to belong. The sail boat pl. 6, 5 had better not be put in this context: I see no reason for the attribution.

Plate 7, 1 and 6-8: remnants of the shoulder, in two zones, of the reverse of the krater 111 (put together in *E* 166f). Pl. 7, 6 has been somewhat increased, thanks to Villard. In *E* 164, note 2, I tentatively connected the fragment pl. 7, 16 with the lower zone with the naval engagement. This has to be withdrawn, as the fragment is unglazed on the inside. This also invalidates the distribution of pl. 7, 7 and 8, to two ships, as I proposed in *E* 167. For the lower part of this krater one still has to count on pls. 2, 2 and 3, 9 (there connected with an alien upper part). Of these pieces Villard has augmented through fortunate joins A 526 (pl. 3, 9) and A 538 (pl. 3, 10). New also is pl. 2, 1. I see no reason to separate from this complex A 539 (pl. 7, 11), which takes with it, as Villard has recognized, the new fragment pl. 7, 10. Finally, there still does not seem to be any reason not to connect the fragment S 491 (pl. 10, 1) with the chariot frieze of this krater.

Plate 7, 2, 3, 5: in this small group pl. 7, 3 seems to me to drop out. Perhaps it is to be connected with a fragment in Athens (German Inst. phot. N.M. 4294: lower deck of a ship with a dead body on it; below, serrated row and black zone).

Plate 7, 9: earlier than the bulk of the figured kraters.

Plate 7, 10-11: see above, on pl. 7, 1, 6-8.

Plate 7, 15-16: connected by Villard with parts of our krater 111 (*E* 167f). From the lower zone of the shoulder, of which heretofore only a small remnant in Athens was known (*E* pl. 5, 1). The piece in Athens must have belonged to the right ship. The only other part of the chariot frieze that can be traced is now in Compiègne (*E* pl. 5, 2): should not pls. 10, 11 and 16, 1 join? See also below, on pl. 10, 25-26, and 34.

Plate 8, 6 (= *F* pl. 9, 3): now augmented by Villard with an important joining piece. This makes even clearer the connection of the fragment to the circle of the combat pictures around the krater A 519 (pl. 5, 7).

Plate 8, 18: the illustration does not convince me that it can be assigned to the complex Brussels-Athens (*F* pl. 4).

Plate 8, 22: belongs to *F* pl. 4, where it probably completes the second warrior from the left.

Plate 8, 25: warrior under one of the handles probably of the same krater as AM 17 (1892), 211, fig. 2 (new photograph *EphArch* [1952] 157, pl. 8, 1), where the helmet is likewise set off from the skull with a special outline. Perhaps it belongs to one of the two warriors, of whom there are three fragments at Athens (*F* 56, note 33).

Plate 8, 26: fragment of the frieze with chariots, *F* 55, pl. 10, 4.

Plate 9, 5: from the handle area (*F* 55f, pl. 10, 1).

Plate 9, 6: from the handle area, most closely related, not only in motive but also in style, to the krater A 517. See also above, on pl. 1.

Plate 9, 13: stylistically most closely connected with the krater pl. 4, and perhaps from the gap in the right half of the picture.

Plate 10, 1: see above, on pl. 7, 1.

Plate 10, 6: assigned by Villard to a krater in Athens, of which a big part of the obverse is preserved (*F* 53f, pls. 5-8).

Plate 10, 11: see above, on pl. 7, 15-16.

Plate 10, 15, 18: part of krater 11 (pl. 2, 2, upper half)?

Plate 10, 25-26: connected by Villard with the shoulder-scene on our krater 14 (*E* 167, pl. 5, 1). We therefore gain as new elements the lozenge chain above the shoulder-scene, and the ridge under the neck which is decorated with a row of dots.

Plate 10, 30-31: see above, on pl. 2, 1-4.

Plate 10, 33: does not this fragment fill a part of the gap between the second and the third hoplite in the picture of the prothesis of pl. 4, 3?

Plate 10, 34: tentatively connected by Villard with the fragments in Athens, *E* pl. 6 (krater 14).

Plate 10, 36: unique style, apparently early.

Plates 11 and 12: a krater completely put together from dispersed pieces. In spite of gaps, all elements of the decoration are known. A fragment of the chariot frieze, a horse, is in Athens (German Inst. phot. N.M. 4292).

Plates 13 and 14, 1-3: Villard groups several new fragments around two larger pieces which had already been thought to belong (A 541 and A 524; *F* 50, note 11). The new pieces give all essential elements of the decoration of the obverse down to the concluding black zone. Most important for the reconstruction of the whole are the parts from the right half of the prothesis (pl. 13, 6, 9-10) and the region of the handle (pl. 13, 2, 3, 8, 14, 15). It appears doubtful to me whether the conclusion, based on the remnants of three three-horse chariots on the shoulder (pl. 13, 1, 7, 9,

10), that a prothesis was also the subject of the reverse, is compelling. A krater with two prothesis pictures would at any rate be unique. Unless a fragment has to be omitted, I should rather assume for the reverse a procession of three-horse chariots.

Plates 14, 4-15 and 15: in order to appreciate fully the meaning of this *CVA* fascicule for the knowledge of this important krater and its interesting representation, one must compare the photograph Giraudon 33863, based on the old status of the Louvre fragments. Although a larger connection is only rarely given through immediate joins, the altogether unusual composition of the prothesis in the chief picture, and the shoulder picture of the reverse can now be reconstructed. The neck, the sequence of the figured friezes, and two of the presumably three ornamental zones which conclude the decoration below, are now known. The tripods under the bier, so important for the understanding of the representation, are now completed. Missing from the bibliography are references to the tripods in Schwendemann *Jdl* 36 (1921) 152f and Benton *BSA* 35 (1934-35) 602f.

Plate 16, 1: this belongs probably to the chariot frieze of krater 14 (*E* pl. 5, 2) and might join ex Louvre A 559. See above, on pl. 7, 15-16.

Plate 16, 23: assigned by Villard to the chariot frieze of a fragment in Athens (German Inst. phot. N.M. 4313), of which there were originally two pieces in Athens (*Adl* 44 [1872] 146f, no. 44, pl. J, 2). The frieze, of an early krater, seems to belong to the big shoulder fragment published in *MonInst* 9, pl. 39, 3 (now fully published, after a photograph, by E. Hinrichs, "Totenkultbilder der attischen Frühzeit" in *Annales Univers. Saraviensis* 4 [1955] 131, pl. 12). The fragment in the Louvre unfortunately does not add much.

Plate 16, 24: a late-geometric fragment, certainly from an amphora. Even apart from this fragment, the late-geometric style has not been categorically excluded from the series of plates. We therefore miss several late krater fragments, such as the two pieces A 544 and CA 1430, which belong; also A 553 (*F* 48, note 3) and S 529 (*BSA* 44 [1949] 110, no. 35 b); lastly, the curious fragment with a sailing vessel (*RA* 25 [1894] II, 17, fig. 3; *BSA op.cit.* 110, no. 35 a). The first four appear on the photograph Giraudon 33861.

The second half of the fascicule continues on thirty-two plates the publication of Attic black-figured vases, III He, pls. 120-151. With a single exception (pls. 120, 4 and 121, 3) this is new material from the Campana collection, brought up from the museum basement. Sir John Beazley, Dietrich von Bothmer, and Jacques Bousquet took part in the unification of fragments to more or less big complexes. Some joins which were made after the plates had been produced allow us to hope that here and there we may perhaps yet go further: pl. 145, 4 and 8 belongs to pl. 137, 5, and pl. 151, 2, 4, 6 belong to pl. 146, 7. Some of the high points in this imposing series of beautiful pots are the two powerful pictures of lions by the Gorgon Painter

(pls. 120, 1-4 and 121, 3), the amphora signed by Lydos (pl. 125), the amphora close to Lydos, with the judgment of Paris (pl. 126), the hydria by the Taleides Painter (pls. 137, 4 and 138), and the magnificent hydria with Triton (pl. 142, 1). Villard attributes the last as "perhaps by the Ready Painter, according to Sir John Beazley," but it is not in Beazley *ABV*.

The competence of the author guarantees the reliability of the descriptive text, as well as the sureness of his stylistic judgments and of his chronological notes. His attributions have almost all been accepted by Beazley in *ABV*. In a few cases original attributions by Beazley are noted in the text. Since Beazley already cites the plates of this fascicule, a general remark to that effect may suffice. As to the subject matter, the text rarely goes beyond what is needed for strict description. The principle is followed to cite no parallels even for the rarer representations and ornaments, nor ever to refer to the pertinent iconographical literature. But the results of iconographic research are denied when the marine monster with which Herakles wrestles is always called Nereus, although this daemon, who unlike the old man of the sea was incapable of changing his nature, is several times inscribed as Triton; the two have long ago been clearly distinguished by Buschor (*Meermänner* 10f and 28ff). Apart from this the exemplary publication occasions but few remarks.

Plate 125: this amphora can only now be appreciated as an important early work by Lydos. Since the Neoptolemos fragment is no longer isolated, all doubts vanish about the meaning of the signature (Rumpf *Sakonides* 9). The old-fashioned decoration is quite unusual for a one-piece amphora of this period (cf., however, *Hesperia* 15 [1946] 126, no. 8, pls. 17, 5 and 18). On the death of Priam see recently Kunze *Schildbänder* (1950) 157ff and (without knowledge of the former) Wiencke *AJA* 58 (1954) 285ff. Just as Lydos connects the death of Priam with the recovery of Helen on his amphora in Berlin, so he unites it here with the rape of Cassandra. In both cases the scenes are not really connected. In the somewhat undisciplined style of this early work the passion is already shown which in the powerful mourning scenes of his mature period (Beazley *ABV* 113, nos. 81 and 84) is united with disciplined form. A detail slurred over in the text and only imperfectly visible on the plate and the text-drawing: does blood drip from the extended arms of Hekabe and the naked woman behind the altar (Andromache?), or do the strokes stand for loose hair which falls down irregularly in front? The fight with Kyknos on the reverse is probably the earliest Attic representation of this myth (cf. Vian *REA* 47 [1945] 5ff, and, in the last instance, S. Karouzou *BCH* 79 [1955] 177ff), a subject often taken up by Lydos. The description of pl. 125, 3 indicates that not all preserved fragments are illustrated. The unusual direction of Zeus (called in the text "homme drapé") toward Herakles, in his intervention in the fight, re-

turns on a plate from the Acropolis (Beazley *ABV* 111, no. 50; new picture *BCH* 79 [1955] pl. 8).

Plate 128: on the horseman amphorae see Beazley *Development* 39f.

Plate 132: the wreath in the hand of the woman in front of the man drawing his sword, and, above all, the Minotaur scene of the companion piece (pl. 133), make plausible Villard's interpretation of the unique scene as a preparation for the fight with the Minotaur. A bronze relief from Aegina (Kunze *Schildbänder* 132) has Theseus drawing his sword against the Minotaur.

Plate 137, 3: the man in a mantle and the youth who raises his right hand are probably judges.

Plate 138, 4: the square between the legs of Theseus is the result of crude retouching.

Plate 141: the charioteer carries a Boeotian shield.

Plate 145: degenerate survival of an old form and decoration. The rosettes on the lip have become discs, the heraldic grouping of the lions (cf. recently, Jacobsthal *Greek Pins* 78ff) has lost substance and is worn out.

Plate 148, 5: the fleeing old man is Nereus, the fishtailed monster is Triton, and the bearded pursuer is probably Herakles. Evidently he aims for Nereus. This representation is for the time being unique and forms the transition from the pictures of the struggle with the Triton to those that set in about 500 B.C. of the encounter of Herakles and Nereus, where the latter is shown as a royal old man. Nereus had been similarly depicted earlier, as a spectator in the struggle with the Triton, and elsewhere.

Plate 151, 5 and 6: transpose the descriptions.

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ATTIC AND SOUTH ITALIAN PAINTED VASES AT HAVERFORD COLLEGE, by Howard Comfort. Table of contents, foreword, 28 photographs. Business Office, Haverford College, 1956. \$15.00.

In this album of photographs, distributed through the Business Office of the college, Professor Comfort has put together fourteen Attic and South Italian vases at Haverford. The table of contents gives the shapes and attributions and distinguishes between items on loan and the Morris gift. There are no descriptions of the subjects and no measurements, but the scale can be approximated on the photographs, which show an upright ruler. The pictures are the work of Norman M. Wilson and Arthur D. Brain. Each is taken horizontally (with a resulting waste of negative space) and enlarged to eight by ten inches. This method of publication is novel, and there is no reason why other colleges with very small collections cannot follow suit. Even at fifteen dollars the student of Greek vases will be delighted to have a set of

photographs. If in addition to the bibliography he could be given measurements in lieu of the inaccurately placed ruler he would have everything except the visual recollection of the vase itself.

The finest vase in Haverford is undoubtedly a lekythos by the Pan Painter (no. 24) which is illustrated in this album on three plates. Professor Henry Immerwahr was the first to recognize its importance. His photographs enabled Miss Richter and the reviewer independently to attribute the vase to the Pan Painter. Professor Comfort later lent the lekythos to the Metropolitan Museum, where a number of excellent photographs were taken (negative numbers MM 18471-4). At the St. Louis meeting of the Institute in 1948 a paper was read on the subject of the Haverford lekythos. As the paper remained unpublished, I should like to repeat here some observations.

The lekythos is 27.7 cm. high and is well preserved. The shoulder is decorated with five palmettes and two blossoms, bounded above by a kymation. On the body of the vase a seated lady holds in her extended right hand a big skyphoid vessel and has in her left hand a spindle-shaped object which may be a cake or a honeycomb. Facing her, on the left, is a young servant girl about to ladle wine from the skyphos into a phiale held in her left hand. Between them, on the floor, stands a small psykter covered by a lid; behind the seated lady hangs a kylix. Mistress and maid look very much like the similar pair on a small pelike in the Louvre (Beazley ARV p. 365, no. 46) and could easily be taken for the same persons, perhaps members of the painter's own household.

The psykter on the ground is of particular interest, for the shape is rare and short-lived. Beazley has recently given a list of psykters in the second part of *Attic Vase-Painting in the Museum of Fine Arts, Boston* (pp. 6-9), to which a red-figured psykter, without ears, by Myson (Naples, Astarita) and a black psykter with ears (Agrigento) can be added. Representations of psykters on vases are even rarer: I append a list.

Attic Black-Figure: (1) oinochoe, Athens inv. 1045 (Beazley ABV p. 186); (2) fragment, Athens Acr. 2499 (Graef and Langlotz pl. 101); (3) pelike, Bonn 574 (ABV p. 339, foot); (4) skyphos, Heidelberg M 77 (CVA pl. 42, 7); (5) skyphos, Venice, Calif., ex Stroganoff (*Studies Presented to David M. Robinson II*, p. 137, no. 15).

Attic Red-Figure: cups, (6) Chicago and Florence (ARV p. 38, no. 47); (7) Villa Giulia (ARV p. 72, no. 8); (8) Berlin inv. 3251 (ARV p. 80, no. 5); (9) Villa Giulia and, added by Beazley, Naples, Astarita (the Villa Giulia part, ARV p. 915, no. 4); (10) Vienna inv. 137 (ARV p. 104, no. 1; CVA pl. 1, 2); (11) Compiègne 1102 (ARV p. 234, no. 1); (12) Greifswald 316 (attributed by Beazley to the Manner of the Antiphon Painter, no. 1 bis); (13) Berkeley 8/2184 (ARV p. 311, no. 184); (14) oinochoe, Copenhagen ABC 1056 (CVA pl. 157, 4); (15) pelike, Florence (ARV p. 171, no. 41); (16) lekythos, Haverford. In these scenes, the

psykter is once carried without strings (no. 2), three times on a string (nos. 8, 9, 14); three times it stands on the ground (nos. 10, 15, 16); once it is placed in a skyphoid krater (no. 4), once in a bell-krater (no. 11), and six times in a calyx-krater (nos. 1, 3, 5, 6, 7, 13); on no. 12 the exact position cannot be ascertained. A covered psykter appears only on the Haverford lekythos (no. 16); on the Vienna cup (no. 10) the profile of a lid is drawn in silhouette against the side of the vase.

DIETRICH VON BOTHMER

THE METROPOLITAN MUSEUM OF ART

HELIOS, Archäologisch-mythologische Studien über den antiken Sonnengott, by Konrad Schauenburg. Pp. 84, pls. 16. Distributed by Gebr. Mann, Berlin, 1955. D.M. 8.00.

This is the third in the series of select dissertations published by the German Archaeological Institute (see AJA 59 [1955] 68 and 249). It originated in an attempt to discover whether the theory that the representation of the sun as a human face entirely surrounded by rays (Sonnengesicht) was a Christian invention is correct. The author intended to embody the results of this research in a monograph on Helios but soon found that a comprehensive and at the same time detailed treatment of this god would exceed the limits of a dissertation. He has therefore confined himself in the present publication to a study of the problem stated above and a few others either connected with it or of particular interest for the place of Helios in art and mythology.

The book is remarkable for the great number and variety of the works of art discussed, the wide range of its author's reading, and above all for its additions to our knowledge of iconography. It touches also upon religion, and while specialists in that subject may not always agree with the author's suggestions and conclusions they will be interested in the material here presented.

The author's most important contribution is the early history of the *Sonnengesicht*, a word for which I shall use the literal translation sun-face (since such heraldic terms as "sun in splendor," etc. call up too specialized an image). He describes the fully developed sun-face as a head of perfectly circular outline completely surrounded by rays and adds: "It is essential that the head be represented without a neck. The flatter—in the case of a relief—the disklike face is, the more strongly is stressed what is typical of the sun-face. From the point of view of form what it amounts to is the merging of the head with the sun's disk" (p. 11). In the earliest examples this merging is not complete, for they lack the circular outline and the flat appearance of the fully developed sun-face; the head retains its structure, as it does, indeed, in almost all ancient sun-faces. The combination of the three essen-

tial elements, the head in front view, the absence of a neck, and the completely surrounding circle of rays first appears in the second half of the fourth century B.C. It is found as a "symbol" on a Corinthian stater (Babelon, *Traité des monnaies grecques et romaines* II, 3, p. 427, no. 567, pl. 213, 3), on a tetradrachm of Philip II of Macedon (*Revue suisse de numismatique* 25 [1930-1933] pl. 2, 6), on a bronze coin of Sicily with a Phoenician inscription (J. Babelon, *Catalogue de la collection de Luynes* I, p. 213, no. 1102, pl. 40; Imhoof-Blumer, *Revue suisse de numismatique* 23 [1923] p. 195, pl. 2, 19; E. Gabrici, *La Monetazione del bronzo nella Sicilia antica*, pl. 10, 34), and on a bronze coin of Zeugitania struck between 350 and 310 B.C. (H. de Nanteuil, *Collection de monnaies grecques*, p. 136, no. 420, pl. 26; S. W. Grose, *Catalogue of the McClean Collection of Greek Coins, Fitzwilliam Museum* I, pl. 111, 8). It is uncertain, Schauenburg observes, whether the sun-face on these two bronze coins was ordered by a Carthaginian or is to be attributed to the Greek diecutter, but we must reckon with the latter possibility, since the extant Punic sun-faces all belong to a later period. He notes further that the sun-face is not found on ancient coins after the fourth century B.C. Another class of objects on which it appears in pre-Roman times is that of gold ornaments and jewelry. Ninety-three small round gold plaques in Leningrad decorated with a sun-face in relief and meant to be sewn on a garment, as the small holes in them indicate, were found in a woman's grave in the Great Bliznitsa and are dated by a coin of Alexander the Great found in a contemporary burning-place nearby (Stephani, *Compte-rendu* 1865, p. 74, pl. 3, 15); two others, of which the finding place is not known, are described as having on their backs a *coulisse double* for stringing on a thread (S. Reinach, *Antiquités du Bosphore cimmérien*, p. 68, pl. 21, 20; Schauenburg, by a confusion with these, says of the plaques from the Great Bliznitsa, "Die auf ihrer Rückseite angebrachten Ösen lassen auf Verwendung am Gewand . . . schliessen"). Two pieces of jewelry in the Louvre (De Ridder, *Catalogue sommaire des bijoux antiques*, p. 83f, nos. 962, 963, pl. 14; Schauenburg's 23 for the page and 5 for the plate reference are misprints) and two earrings from Kephallenia in the British Museum (Marshall, *Catalogue of Jewellery*, nos. 1847 and 1848, p. 200, pl. 32) are Hellenistic. The earrings have the form of a Nike holding up a disk decorated with a sun-face. Schauenburg interprets it not as the sun's disk but as a shield, because, when the bust of the sun is represented on the disk, the rays surround the disk itself, not the god's head. One more piece of Greek jewelry remains to be mentioned, the gem in the collection of Professor D. M. Robinson published by him as a representation of Selene (*Hesperia*, Suppl. 8 [1949] p. 315, no. 18, pl. 41); Schauenburg takes it to be Helios.

The sun-face in the pre-Roman period is not confined to coins and jewelry, but appears also on a plaster relief in Cairo and on a relief vase formerly in

Smyrna; Schauenburg publishes photographs of both. The plaster relief, which is based on an original of about 340-320 B.C., shows a naiskos in which Kybele is enthroned; on her right stands Hermes, on her left a goddess with bow and quiver on her back who holds two torches. On the peak of the pediment is a round face surrounded by rays except for the part that rests on the roof. It is approached on either side by three armed men, interpreted by Schauenburg as Korybantes, who are marching up the slope of the pediment. As there is other evidence for a connection between Helios and Kybele, Schauenburg takes the face to be that of Helios.

The vase is one of a group of eight shown in a photograph in the Archaeological Institute of Heidelberg University; all were apparently destroyed in the fire of Smyrna after the First World War. The sun-face here appears in the fully developed form described at the beginning of this review. As the author remarks, it reminds us of mediaeval representations. The dating of the vase is difficult, owing to the lack of comparative material. He concludes that it must have been made in some local workshop of Asia Minor. The vases photographed with it are nearest in shape to Hadra vases; on the presumption that all belong to a single find he dates it in the Hellenistic period. No other sun-face of the pre-Roman age is as schematized as this.

Neither are any examples in Roman art, to judge, at least, from Schauenburg's descriptions and from such illustrations as are available to me. One would like to know more about the face on a medallion on the forehead of a portrait-head in Brussels (Cumont, *Catalogue des sculptures et inscriptions antiques [monuments lapidaires] des Musées Royaux du Cinquantenaire*² [Brussels 1913] no. 35, pp. 45f; Schauenburg, fig. 12); it is described as a round mask surrounded by roughly chiselled strokes. Some of the rays and part of the outline of the "mask" appear faintly in Schauenburg's illustration. The surface is damaged. Schauenburg adopts Cumont's suggestion that the medallion marks its wearer as a priest of the Sun. I shall not enumerate the other Roman examples, which occur in architectural sculpture, on a helmet, as a shield device in the *Notitia dignitatum*, on a chamfrain, and on a lamp. The head of Helios on the Vatican tondo (p. 23f) has a neck and is therefore not a sun-face; this is not made clear in the text, since the author uses the word *Kopf* both of this head and of true sun-faces.

In two of the Roman examples a rayed nimbus is substituted for the circle of rays.

The author next takes up Iberian and Punic sun-faces. Of the two examples on Iberian stelae published by P. Paris (*Essai sur l'art et l'industrie de l'Espagne primitive* I [Paris 1903] 208, figs. 195, 196), one, a round face surrounded by flame-like rays enclosed in a circular frame, is a type of the fully developed sun-face that is not found again until the

Middle Ages. The other, though it may represent the sun, is perhaps not a sun-face, for the radiating lines could be a primitive stylization of hair. Two more, on statues of priestesses from Cerro de los Santos (Paris, *op.cit.* p. 206, fig. 191, and pl. 8), are identified as sun-faces by the crescent moon opposite them. Schauenburg is inclined to agree with Paris that the occurrence of the sun-face on Iberian monuments is due to Punic influence. Sun-faces of various forms are found on neo-Punic stelae; for examples reference is made to Gauckler, *Catalogue du Musée Alaoui*. Schauenburg notes that no. 657 (Gauckler, pl. 18) resembles that on the Smyrna vase (*supra*) in the form of its rays but differs from it in the circular frame in which they are set.

A short section is devoted to representations of the sun-face that, in the author's opinion, are forgeries or of doubtful authenticity.

The chapter on the sun-face ends with a discussion of the origin of this form. There is no evidence, the author finds, that the Greeks borrowed it from another people. It had its roots in the representation of the head instead of the whole figure, particularly on coins and gems. That it first appears on coins is, therefore, not surprising. It was an ornamental form that developed out of the rayed head of Helios, a form eminently suitable for use as a tiny coin "symbol" and as a decoration for paillettes. It was not created by drawing a face upon the sun-disk. It soon acquired a symbolic character, which appears for the first time on the plaster relief with Kybele in Cairo and in an emphatic manner on the London earrings, becoming more and more pronounced under the Empire. Most of the extant examples have Eastern connections. Schauenburg therefore concludes that the incentive for the later diffusion of the type must be sought in the East and that Greek artists had no influence on Christian art in this respect. The first post-classical sun-face, the one in the Rabula gospel, likewise comes from the East.

The author notes further that ancient artists never used the sun-face in mythological scenes or in landscapes. Even the Romans, in such scenes, depicted at least the bust of the Sun. It was in Christian art, when the heavenly bodies were no longer regarded as gods, that this use of the sun-face became popular.

He observes that astrology, for which it provided a welcome symbol, probably had a good deal to do with the post-classical diffusion of the sun-face and that in Islamic art its use is preeminently astrological.

Schauenburg's explanation of how the Greek sun-face originated is reasonable. It is possible, however, that he has dated the beginning of its symbolical use much too early (*symbolical*, of course, does not refer to coin "symbols"). His interpretation of Nike holding up a shield with a sun-face as device on the London earrings must, I think, be rejected. He makes this the first of a series of representations the other members of which are a Victory holding up such a shield on a late Roman chamfrain from Moesia Inferior

(*JOAIBeibl* 39 [1952] col. 107, fig. 28), a relief from a gateway in the Seljuk wall in Iconium (L. de Laborde, *Voyage en Orient: Asie Mineure*, pl. 64; *DACL* I, 2, p. 3025f, fig. 1057), which must have been derived from a classical original and which shows two flying Victories holding a disk with a sun-face, and a relief of the Visigothic period in the church of Santa María de Quintanilla de las Viñas in Burgos (*Ars Hispaniae* II, 305, fig. 322), which also must have been derived from a classical original and which shows two flying angels carrying a shield with the bust of the Sun. He associates it also with various late Roman representations in which Victory and Sol appear together. His argument for the symbolical interpretation of the sun-face on the chamfrain and on the presumed original of the relief in Iconium is based on the emphatic manner in which the shield bearing it is displayed and on the position of Sol as the protector of the Empire and the army under Aurelian and later. But Helios had no such functions in Hellenistic Greece. Schauenburg believes, however, that a connection between him and war appears in Aeneas Tacitus 24.15 and Polybius 7.9. Neither passage suffices to prove this. Aeneas is discussing the use of watchwords in war and recommends choosing those that are easy to remember and as closely related as possible to the operation intended, e.g., Artemis Agrotera when the men are going out ἐπ' ἀγρῶν, Hermes Dolios ἐπὶ κλοπῇν τινα πράξων, Helios and Selene τοῖς φανεροῖς ἐγχαρήμασιν. The connection here is between Helios and τὰ φανερά, not between Helios and war. Polybius 7.9 gives the text of the oath of the alliance between the Carthaginians and Philip V of Macedon. The list of gods invoked to witness it is divided into groups, each introduced by ἐναντίον. The passage in question reads ἐναντίον θεῶν τῶν συστρατευομένων καὶ Ἡλίου καὶ Σελήνης καὶ Γῆς, and is cited earlier by Schauenburg (in a discussion, based on W. Baegel, *De Macedonum sacris*, 128f, of the Macedonian sun cult) as evidence that the Macedonians believed that Helios and Selene accompanied them in war. Since it seemed to me probable that Helios and Ge are here invoked as the traditional witnesses of oaths (in which capacity they appear in the Iliad and in many inscriptions; see Cook, *Zeus* II, 728-729), I consulted Professor A. D. Nock, who gave me the following information. "The deities (sc. those in 7.9.2-3) must be part Macedonian, part Punic, part generalized (see Usener, *RAM* 58 [1903] 17-18). The idea that the συστρατευόμενοι are Helios, Selene, and Ge has the support of G. Egelhaaf, *HZ* 53 (1885) 458, and—what is much more impressive—of Usener (*loc.cit.*). Baegel, 112, 128, concurs and on 112 cites Arrian 3.7.6." Professor Nock adds the comment that the Arrian passage is after all about an eclipse. His conclusion as to Helios, Selene, and Ge in the oath preserved by Polybius is, "These as nature powers are natural oath deities; they are not war-companions." For the latter see his article in *JRS* 37 (1947). As for the manner in which the shield is held on the London earrings, it would seem not merely

emphatic but unnatural and hence contrary to the spirit of Greek art, if the intention were to *display* the shield. Raising a shield, however, was one of the ways of signaling at a distance (see Herodotus 6.115; Xenophon, *Hellenica* 2.1.27; *Diadorus* 20.51.1-2). Since it is Nike who here raises it, the signal must mean, "We have won." What prompted the artist to choose this theme was, of course, the type of earring he was designing, a variation on the disk with pendent figure; the figure, instead of hanging from the disk, is represented as holding it. A sufficient reason for his choice of the sun-face as device is that it is ornate, fills the circle well, and was more up-to-date, more modish, than the traditional Gorgon. (The shield functioned as a signaling instrument by catching and reflecting the sun's light, but to interpret the sun-face as an allusion to this fact would, I think, be false.)

As for the sun-face on the Kybele relief, Schauenburg's argument for its symbolical value is that the two files of Korybantes are marching toward it. Further on, however, he suggests that the artist may have put the Korybantes in this unusual place out of mere *horror vacui*. In that case I see no reason for regarding the sun-face as anything more than an ornamental acroterion.

In his chapter on the sun-face the author also discusses a number of more or less related subjects, the most interesting of which is the representation of the sun on the calyx krater in Parma by the Sommarivilla Painter (Beazley, *EVP* 37-39, no. 1; A. G. Roth, *Die Gestirne in der Landschaftsmalerei des Abendlandes* [1945] fig. 22; since Schauenburg wrote, a better photograph has been published by Pallottino in *Mostra dell'arte e della civiltà etrusca* [Milan 1955] pl. 86). He takes this to be an Etruscan way of representing the sun-god and cites as parallels the heads in rayed circles on two Etruscan mirrors, one in the Bibliothèque Nationale, of about 520 B.C. (Babelon and Blanchet, *Bronzes antiques de la Bibliothèque Nationale*, p. 517, no. 1300; Gerhard, *Etruskische Spiegel* IV, pl. CCXCII; *RM* 27 [1912] pl. 9) and one in Boston, of the late archaic period (Schauenburg, fig. 1; described, but not illustrated, by Körte in Gerhard, *op.cit.* V, p. 210, no. 158a; Schauenburg in his text dates it in the second century B.C., but has since corrected this in a letter to Dr. von Bothmer); he adds as a more remote parallel a head that may be Eos or Selene on a Praenestine mirror of the fourth century B.C. in the Louvre (Gerhard, *op.cit.* IV, pl. CCXCIX; Matthies, *Die Praenestinisches Spiegel*, p. 75). His argument is that the Sommarivilla Painter's sun-god cannot be based on a Greek model, since on Greek vases Helios is always represented in his chariot. He has failed, however, to notice that the sun-god on the krater by the Sommarivilla Painter is dressed as a charioteer, as is indicated by the crossbands. He has also failed to give due weight to Beazley's comments that the garment he wears is of the ornamental kind that becomes common in Attic painting from the middle of the fifth century on and that the vase itself must be

founded on an Attic original of about 420 B.C. Evidently the Sommarivilla Painter's sun-god is founded on an Attic Helios, and the most that might be conjectured is that what we see here is a conflation of the Attic with what Schauenburg takes to be the Etruscan type. The rayed circle would have been substituted for the Attic rayed disk, and a ground line that accounted for our seeing only the head and breast of the god would have been omitted (or perhaps we should say the ground line and as much of the horses as appeared in the Attic original). It seems to me, however, that Schauenburg has not proved that an Etruscan artist who drew a head in a rayed circle meant it as a complete representation of the god rather than as a partial image or as shorthand for the full figure. The artist of the Boston mirror appears to have been inspired by the idea of the sun's rising from the sea, but he has transformed the picture into a fine circular design. The sea becomes a wave pattern with leaping dolphins above it; this runs right round the mirror's disk, being bordered on the outside by an ivy wreath and on the inside by a guilloche. Within the frame of the guilloche the sun-god appears as a head in profile in a rayed circle. This could no more be called a peculiar type than could a head on a coin. The mirror in the Bibliothèque Nationale poses a difficult—or rather, in my opinion, insoluble—problem of interpretation. Schauenburg, following Eisler, thinks it represents Apollo and Dionysos in Delphi. He adds: "As the sun is not in the heavens, it is to be understood as a symbolical allusion to a precise situation." Apollo is about to leave for the duration of the winter, and Dionysos is in possession. The Sun, therefore, looks at Dionysos. If the Sun-god is symbolical here, I suggest that he could well be represented in shorthand form, as a head. Another interpretation, however, is perhaps possible, and could be supported, as Dr. von Bothmer has pointed out to me, by the fact that the head in the rayed circle is not in the same plane as the two standing figures, since the end of one of the rays passes behind the hand of the figure on the right. The Sun may be thought of by the artist as low in the heavens; only his head appears, the rest of his figure being hidden below an imagined horizon.

If there was no such peculiar Etruscan type as Schauenburg has assumed, there was no reason for the Sommarivilla Painter to transform the Helios of his Attic original. How then account for this unique representation (unique, we should add, not only in Attic art but in Etruscan as well, for in none of the Etruscan works cited as parallels by Schauenburg is the breast of the Sun-god shown, and in none, above all, do the other figures in the scene *look at* the Sun, whereas on the Sommarivilla Painter's vase he is the center of attention)? I suggest that a unique theme might have inspired an Attic painter to create such a form—the theme of the satyr play here illustrated. Perhaps the satyrs have stolen some of Helios' cattle and are about to sacrifice them. We remember that when the companions of Odysseus sacrificed the cattle of the Sun

they used leaves instead of barley. (*Odyssey* 12.357f). Might the satyr carrying the branch on the left have intended to strip it of its leaves? We also remember that they were storm-bound on the island for a whole month by Notos, a wind that brings rain. The satyrs may have argued that Helios would not be able to see them in such weather (cf. Prometheus' anxious question about the state of the sky and his final trusting to a parasol to shield him from the observation of Zeus in Aristophanes, *Birds* 1501ff). Suddenly there is a lull in the storm, and they catch a glimpse of Helios; his chariot and horses are hidden by the clouds, but they see him and one of those spectacular displays of rays that may occur at such times. All this, of course, would have been described in agitated dialogue or a lively choral ode.

Ancient representations of the face in the moon are also discussed in this chapter. On vases it appears as a woman's head in profile on a disk. One such example on a Gnathian skyphos in Syracuse, inv. 29653, is published by the author in his figure 4. Another, on an Attic squat lekythos in the British Museum (BMQ 3 [1928-1929] 43f, pl. 25 c) is interesting for the rays around the disk. Occasionally we find human features added to the crescent moon; among examples mentioned by the author are a poutrel from a grave of the third or second century B.C., a number of amulets found in Spain, and a relief on the breast of an Iberian statue from Cerro de los Santos in Madrid. He gives no example of a true full-moon face, i.e., one in which disk and face are merged and appear simply as a round face in front view. Such a face is found on a Roman gravestone from Noricum in the Landesmuseum, Gratz, published after Schauenburg wrote by Erna Diez, who interprets it as the moon (*JOAI* 42 [1955] 74-84, fig. 44).

In a brief discussion of heads in the calyces of flowers Schauenburg argues that they are not solar emblems. The four faces on the Farnesina ceiling with scenes from the story of Phaethon are not sun-faces but, as Brendel saw, gorgoneia; Schauenburg adds that the "tongues" surrounding them are flower petals.

In his second chapter the author shows that there is no evidence for a "solar" gorgoneion. He interprets the shield device with the puzzling rays in the Naples Gigantomachy, Manner of the Pronomos Painter, no. 3 (Beazley, *ARV* 850), as a gorgoneion on a thunderbolt. After examining the representations of Helios on armor (both those described in literature and those on extant works of art) he concludes that they have no apotropaic significance. This is in the main an excellent chapter. It contains, however, some mistakes in interpretation that must be noted. Anyone familiar with representations of Helios in fifth-century Attic art will, while reading lines 464-466 of the description of Achilles' shield in Euripides' *Electra*, automatically see in his mind's eye the figure of the god. This is what the poet meant us to do. He relies on the mention of the blazing disk and the winged mares to evoke the rest of the picture. The interpretation adopted (prob-

ably from Jessen, *RE* VIII, 86) by Schauenburg, a disk above an empty chariot, would be possible only if we had evidence that representations of that type were known to Euripides. As Schauenburg himself notes, the earliest such representation we have is on a Hellenistic altar in Pergamon. Another failure to appreciate poetic style appears in the statement (note 357, p. 72) that in Sophocles, *Antigone* 100ff, Helios is sung of as one of the gods who drove the enemy from Thebes. It is not the god but the sunbeam that the chorus address here, and *κνίσαα* is figurative. For an instance of questionable evaluation of archaeological evidence in this chapter see the discussion of connections between Helios and Demeter, *infra*.

The first section of the third chapter discusses the following representations of Helios and Demeter illustrating the myth of the rape of Persephone: (1) gold band in Leningrad of the fourth century B.C. (S. Reinach, *op.cit.* 46, pl. vi, 3; Baumeister, *Denkmäler des klassischen Altertums* I, 130, fig. 136; Schauenburg identifies the seated figure with scepter as Zeus, the driver of the chariot in the air in front of him as Helios, and the woman running to the right on the other side of the knot as Demeter hurrying toward Helios); (2) Apulian volute krater in Naples (Heydemann, no. 3256; *MonInst* II, pl. 31); (3) scene on the neck of an Apulian volute krater in the Louvre (Montfaucon, *L'Antiquité expliquée et représentée en figures*, supplément III, pl. 35; best illustration, G. Hafner, *Viergespanne in Vorderansicht*, pl. 3, from a photograph); (4) fragmentary Locrian relief in Reggio (*Ausonia* 3 [1908] 232, fig. 83; P. Zancani Montuoro and U. Zanotti-Bianco, *Heraion alla Foce del Sele* I, p. 129, fig. 36; a more complete photograph was published after Schauenburg wrote by Dr. Erika Simon, *JOAI* 41 [1954] 85, fig. 51); (5) fragmentary relief from the tomb of the Haterii (Benndorf and Schöne, *Die antiken Bildwerke des Lateranensischen Museums*, 205ff, nos. 336, 337, 338, 341, 352, pl. vii, 1-5; Schauenburg publishes a photograph as figure 24 of the present work). He interprets no. 5 as the rape of Persephone in the presence of Helios; he takes the woman with the cloak over her head immediately to the left of Helios to be Demeter. Nos. 1-4 represent the episode in which Demeter asks Helios who it was that carried off her daughter. Schauenburg's description of no. 4 needs to be modified; Helios is not standing, but, as Dr. Simon pointed out (*loc. cit.*), "rising," the chariot and most of the god himself being hidden behind the vault of heaven (indicated by the curved line). Her identification of the little figure hurrying off at the upper left as Eos is also to be preferred to Schauenburg's Nyx. Nos. 2 and 3 are the most interesting for the history of the story. On no. 2, in the middle of the top row of figures, we see Demeter mounting Helios' chariot. Schauenburg thinks it possible that this disagreement with the account given by the *Homeric Hymn to Demeter* may be due to the painter, although he is inclined to credit the version of the rape on this vase to an Orphic poem, because

of the presence of the Korymbantes (for the latter cf. also the Early Apulian hydria, no. 07.128.1, in the Metropolitan Museum [Richter, *Handbook of the Greek Collection*, Cambridge, Mass. 1953, pl. 96, f]). No. 3, however, the correct interpretation of which is due to Schauenburg, could only have been based on a literary source. Here we see Demeter and Helios in the chariot; the chariot itself and the horses are in a ship. Helios may be landing after his night's journey over the water. For the chariot in the ship Schauenburg compares a neck amphora by the Gela Painter (Haspels, *ABL* 213, 177), of which he publishes a photograph (fig. 22) and which, he points out, shows Helios with chariot and horses in the golden bowl. He further suggests that Demeter may have just come from her visit to the Great Bear, described by Ovid, *Fasti* 4.575ff. The source was, he thinks, an Orphic poem; this is suggested by the two figures that flank the scene, a Korymbant and Pan holding a torch.

It occurs to me that both these variants, Demeter in Helios' chariot and Demeter and Helios with the chariot in the ship, may have been inspired by dissatisfaction with the traditional account. The most natural interpretation of lines 60-89 of the *Homer Hymn to Demeter* is that Demeter and Hekate go to meet the moving chariot and Helios stops his horses, talks with Demeter, and then drives on; that the ancients so interpreted them is suggested by the gold band in Leningrad and the Locrian relief in Reggio. In the fourth century increased knowledge of astronomy and emphasis on the regularity of the movements of the heavenly bodies may have led some people to carp at such an interruption.

This chapter and the book end with a section in which the author seeks to prove from archaeological and literary evidence that the relations of Helios to Demeter-Kybele and other female divinities (Caelestis, Isis, the Carian Aphrodite, Hekate, Artemis Ephesia, and Artemis Anaitis) were closer than is generally assumed. Some of this archaeological evidence was presented earlier in the book, but I have reserved discussion of all but the plaster relief in Cairo (supra, ¶4) until now. The ninety-three small gold plaques decorated with sun-faces (supra, ¶3) were found in the tomb of a woman thought to be a priestess of Demeter. In the same tomb were found two hundred and ten small plaques decorated with gorgoneia; they are of impure gold and cursory workmanship, and hence must have adorned a different dress (facts not mentioned by Schauenburg). In the tomb of the Volumnii in the pediment above the entrance is a shield decorated with the bust of the Sun-god (*RM* 57 [1942] 133f, fig. 3), and in the opposite pediment is a shield with the head of Medusa. Schauenburg admits the possibility that the two heads may be purely decorative, but is more inclined to interpret the Sun-god as a symbol of the light of life and as a reference to survival in the hereafter and the Gorgon as apotropaic. He finds the same meaning in the gold plaques just mentioned, but adds that we must also reckon here

with the penetration of astral conceptions into the cult of the goddess. Seven miniature terracotta shields with the bust of Helios were found in a Hellenistic chamber tomb in Eretria; a number of others had a Gorgon's head as a device. Twenty-eight Erotes, at least four of whom were musicians, were found in the same tomb and are now in Boston (on this find see Kourouniotes, *ArchEph* [1899] 228f; Wolters *Jdl* 14 [1899] 120f; Vollmöller, *AM* 26 [1901] 354ff; *AJA* 2 [1898] 147; to these references, given by Schauenburg, add G. H. Chase, *Greek and Roman Antiquities, A Guide to the Classical Collection* [Boston 1950] 120, fig. 148, which shows five of the Erotes, including the one in oriental costume). The tomb was in use for several generations, and the objects belong to different burials, but all seem to be of the third century B.C. The shields are said to have been hanging on the walls or lying on the couches of the tomb. Schauenburg believes that the occupants were adherents of a mystery cult, his reasons being the large number of shields with the bust of Helios, the fact that one Eros wears oriental costume, and also, apparently, the fact that another plays the cymbals. He interprets the Helios device as a reference to the sun that shines for the blessed in the other world (cf. e.g., Aristophanes, *Frogs* 155, 454ff; Pindar, *Ol.* II. 67-69; frags. 129, 130). The evidence of the tomb find seems to me insufficient for such a conclusion. The relative frequency of the Helios device is here not so great as one would gather from Schauenburg, who does not give a complete list of the other shields. Here is the list, with his figures for the Gorgon shields corrected: (A) *round shields*: seven with bust of Helios (six in Boston, one in Athens), seven with Gorgon's head on aegis (five in Boston, two seen by Vollmöller in the house of Kokas in Chalkis), two with head of youth with star on either side (in Boston), one with head of youth wearing what appears to be a flat hat (in Boston), four decorated with star, concentric circles, and arcs (seen by Vollmöller in the house of Kokas); (B) *oval shields*: eight with youthful head, interpreted by Schauenburg as a Gorgon, in the middle of a thunderbolt (seven in Boston, one in Berlin), four with Gorgon's head surrounded by scales in the middle of a shaft (in Boston), six with head of dog in the middle of a shaft (three in Boston, three in Athens). Of the eight types here enumerated four are represented by six to eight examples each and two by four examples each. My impression is that the people who made these offerings were accustomed to buying in quantity. For the mystical connotations of the winged figure in oriental costume Schauenburg refers to Curtius, *RM* 49 (1934) 140, who would apparently interpret every such figure as a daimon of immortality from the circle of Kybele. I should say rather that each must be judged by its action, its attributes, and the milieu in which it appears. Here the figure is one of a group of musicians and is playing the flutes. It is therefore probably an Eros masquerading as Olympos. Among the terracottas from Eretria in the British Museum is an Eros in similar costume playing the lute,

an oriental instrument (Walters, *Catalogue of Terracottas*, C 192). A terracotta from Anthedon in London might seem to invalidate our identification, for this Eros, though in oriental costume, plays the lyre (Walters, *op.cit.* C 231, pl. 33). It must be remembered, however, that a vase in the Manner of the Meidias Painter (Beazley, *ARV* 835, 10) shows Olympos playing the lyre.

The rest of Schauenburg's evidence for connections between Helios and Demeter and Kybele is presented on pp. 45-47. Some is Hellenistic, but most of it belongs to the Roman age and can be properly evaluated only by specialists in the religion of that period. "An den Heliaden" (p. 47, line 5) is an error; the Heliadai are a *παῖδες*, as Blinkenberg (*Dragma*, roof), to whom he refers, states. On the two altars to Helios in the precinct of Demeter at Pergamon see Nilsson, *Hessische Blätter für Volkskunde* 41 (1950) 11f.

The twenty-six illustrations are very well reproduced and include hitherto unpublished pieces and photographs of others previously known only from drawings.

I noted the following misprints, omissions, and minor mistakes. P. 20, third paragraph, third line from end: *for dritten read zweiten*. Pp. 23-24: on the tondo in the Vatican with Greeks and Amazons see Dr. von Bothmer's review of Bielefeld's *Amazonomachia*, *Gnomon* 24 (1952) 198. P. 24, second paragraph, last line: Pyxisboden seems to be a slip of the pen for Kylixboden or Schalenboden; fourth paragraph, first line and next to last line: *for Notitiae read Notitia* (and make the same correction in note 178, p. 59, and note 182, p. 60); same paragraph, fourth line from end: *for Pausanias read Proklos*, and in the note on this passage (181 on p. 60) *delete 9, 10, 4*. P. 25, third paragraph, eleventh line: *for Terrakotta-Statuette read Terrakotta-Büste*. P. 26, next to last paragraph, second line: *for Cerros read Cerro*. P. 39, next to last paragraph: it should have been noted that Suetonius, as the context shows, gives the episode of the *coronae exploratoriae* as an instance of Caligula's extravagant behaviour. P. 42, third paragraph, third line: the footnote reference 374 should be transferred to the sixth line after Demeter-Kybele. P. 48, note 3: the fact that the Greeks retained the Indo-European word for sun should not lead us to expect them to be sun-worshippers; note 11, fifth line: in the Brommer reference *for 179 read 172*. P. 49, note 21: the Head reference 635 should be transferred to the first line after Megiste (for Lampsakos the page reference in Head is 530); note 24, first line: in the Babelon-Blanchet reference *for 512 read 517*. P. 51, note 45: for the face in the moon add a reference to Sophocles, frag. 871, 6 (Jebb-Pearson); note 47: add a reference to Beazley's review of *CVA Bonn*, fasc. 1, in *JHS* 59 (1939) 150. P. 52, note 68: *for F 35 read F 305*. P. 54, note 111, fourth line from end: insert a comma between Berlin and Paravey; note 114, next to last line: *for Diochrysostomus read Dio Chrysostomus*; note 115, second line: *for Grecques read Grecques*. P. 55, note

121, first line: *for Luyes read Luynes*. P. 56, note 145, fourth line: *for Eusebuis read Eusebius*; note 146, second line: *for MonPiot 60 read MonPiot 40*. P. 58, note 168, ninth line: *for Hb. Bf. read Hb. Rf.* P. 60, note 190, first line: *for P. B. Huguet read H. Schlunk and for 321 read 322*; second line: *for Hispanico per read Hispanico por*. The name of the author of this work is Juan Contreras y López de Ayala, Marqués de Lozoya. P. 60, note 194, third line: *for Cook I 206 read Cook I 296*. P. 61, note 210, first line: *for Garcia read García and for di read de*; second line: *for Cerros read Cerro*. P. 61, note 212, first line: *for Nr. 691 read Nr. 693*. P. 62, note 215: the beginning of this note will mislead readers who do not recall that the "Twelve Gods" of Varro, *Res Rusticae* I.1.5-6, are not the group ordinarily meant by that name. Is the Varro reference really pertinent here? P. 66, note 263, second line: *for ML II 2 read ML I 2*. P. 67, note 267, second line: *for Cook III 845ff read Cook III 805, 845*; third line: *for Beazley, EVP. Taf. 13, 2 read Beazley, EVP. Taf. 13 A, 2*. P. 68, note 293, next to the last line: *for De nat. deorum read De rerum natura*. P. 70, note 320, third line: add to the early mentions in literature of the chariot and horses of Helios Mimnermus, frag. 12, lines 9-11; sixth line: *for Abb. 21 read Abb. 22*; thirteenth line: the Gallatin lekythos is now in the Metropolitan Museum (41.162.29). P. 71, note 322, second line: see now the recent article by J. Marcadé, *BCH* 80 (1956) 161ff, on the Helios of the east pediment of the Parthenon. P. 77, note 405, next to last line: *for 213, 17 read 213, 177*. P. 83, second column, seventh line: *for Anm. 406 read Anm. 404*; line 17: the reference to note 448 that the index here gives for the mirror published by Körte in the fifth volume of Gerhard, *Etruskische Spiegel*, pl. 158 is wrong; I have not been able to find where Schauenburg mentions it. The mirror itself appeared early in 1957 in the Toronto market.

MARJORIE J. MILNE

THE METROPOLITAN MUSEUM OF ART

LIBANIUS ET LA VIE MUNICIPALE À ANTIOCHE AU IV^e SIÈCLE APRÈS J.-C., by Paul Petit (Institut Français d'Archéologie de Beyrouth, Bibliothèque Archéologique et Historique, tome 62). Pp. 446, 3 maps. Librairie Orientaliste Paul Geuthner, Paris, 1955.

This volume, a work of exceptional distinction, is the first comprehensive monograph on Libanius to appear since G. R. Sievers' *Das Leben des Libanius* (1868). It is definitive both as a biography and as a study of the municipal institutions of Antioch as we see them in Libanius' writings and related material. The book will be of value to archaeologists not only as a source of information concerning the history of Antioch, but for its treatments of archaeological subjects such as games and spectacles, notably the local

Olympic Games and the *venationes*, together with the various buildings at Antioch and Daphne which were used for these performances (theatres and hippodromes at both places, exercise grounds, the amphitheatre, etc.). Under the economic aspects of the subject, the author treats coinage; commerce; agricultural production and the exportation of the local products (wine, oil, wheat); building activities in the city, including the financing of new construction; the aqueducts and public baths and their maintenance; pagan deities as protectors of cities; the local manufacture of arms for the government. Our knowledge of the activities connected with all these subjects in Syria at this period is growing constantly, and the author has made good use of the evidence (including the results of the excavations, where applicable) to re-create for us the life of Antioch—in those days an enormous and prosperous city. There are three maps: (1) the natural contours of the Orontes valley and the rainfall in Syria; (2) a plan of Antioch based on the hypothetical reconstruction published by C. R. Morey and on the principal results of the excavations of 1932-1939; (3) commercial routes in Syria. There is a first-rate bibliography.

GLANVILLE DOWNEY

DUMBARTON OAKS
INSTITUTE FOR ADVANCED STUDY

A BIBLIOGRAPHY OF APPLIED NUMISMATICS, by *Cornelius C. Vermeule*, pp. 180. Spink & Son Ltd., London. 1956.

This bibliography has been compiled to be useful in the study of numismatics in the fields of Greek and Roman archaeology and the fine arts. It will also assist the scholar in locating numismatic references to problems of a non-numismatic nature.

The four major divisions of the bibliography indicate the scope of the work; Part I, Archaeology and Art History; Part II, Iconography; Part III, Geography, Topography, and Architecture; Part IV, Related Works in the Fields of History, Politics, and Religion.

Most of the entries are made more valuable by the addition of brief notes by the author summarizing or commenting on the publications. He has shown his broad viewpoint in archaeological studies by making this bibliography of numismatics a useful tool, both to the numismatic specialist and to the scholar and student who wish to use the study of numismatics as an aid in their own work.

JOSEPH V. NOBLE

MAPLEWOOD, N.J.

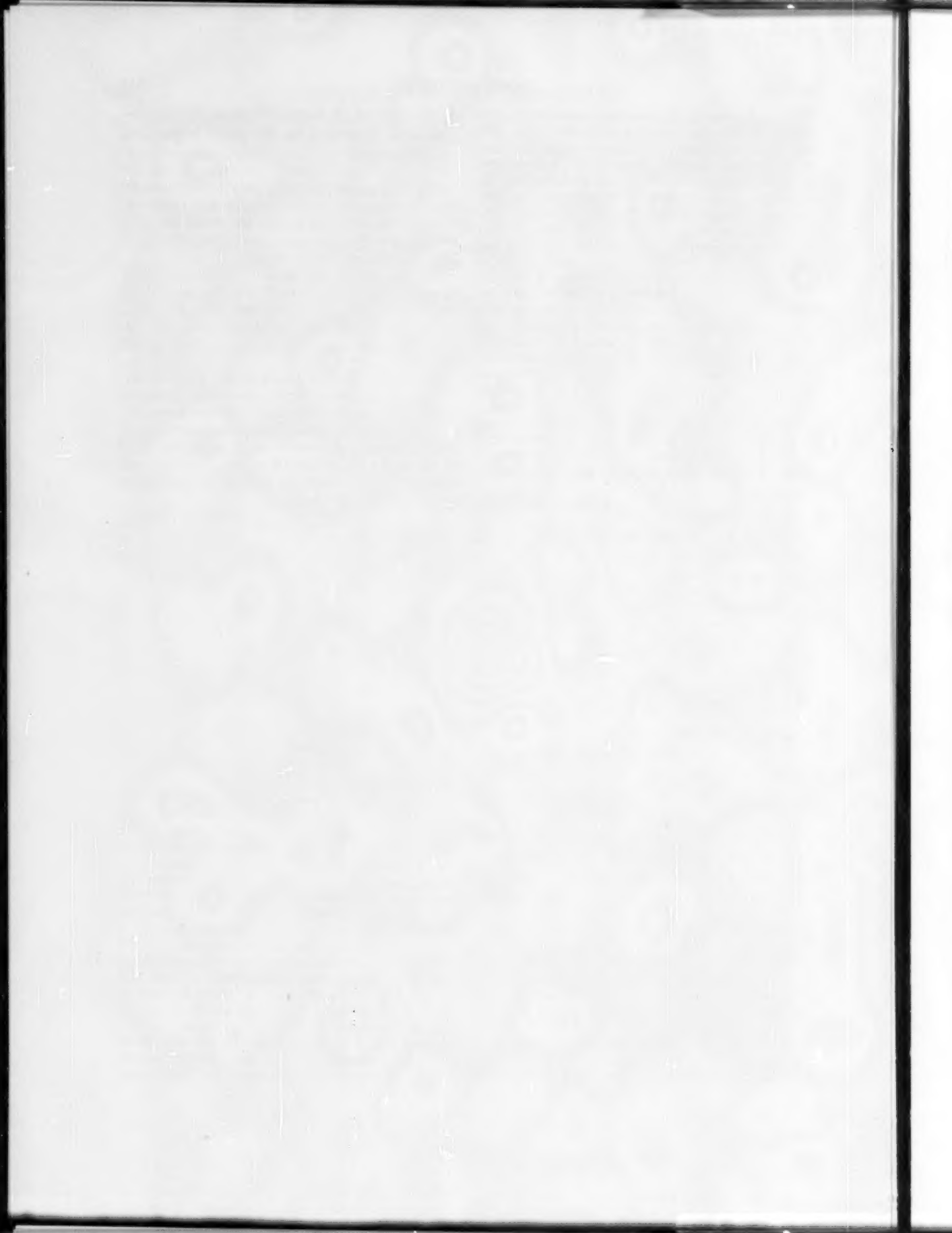




FIG. 1. Trajan. Fogg Museum. Front



FIG. 2. Front. Location of samples

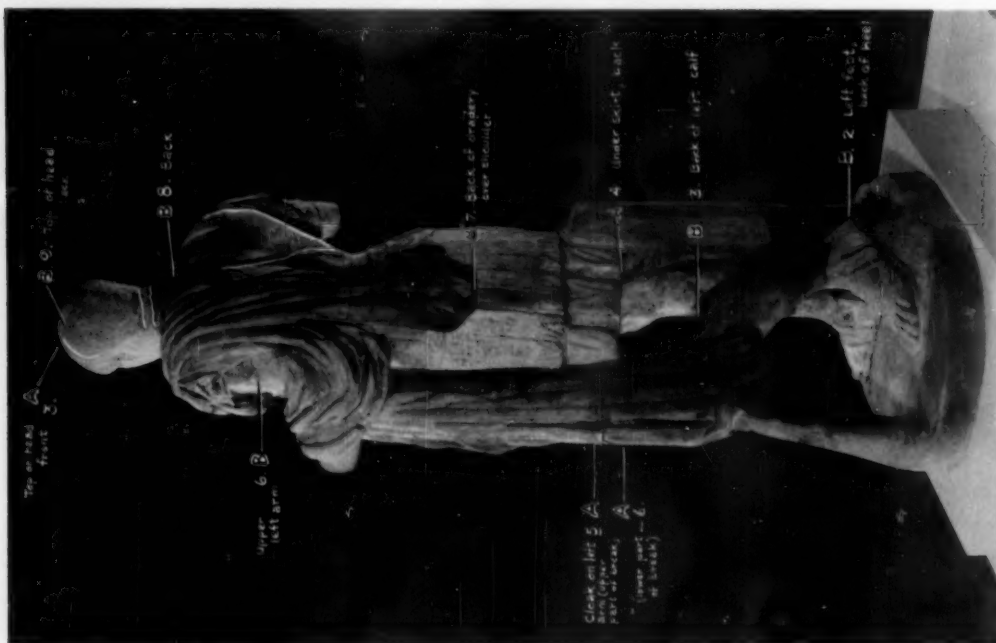


FIG. 2A. Back. Location of samples

Trajan. Fogg Museum



FIG. 3. Back

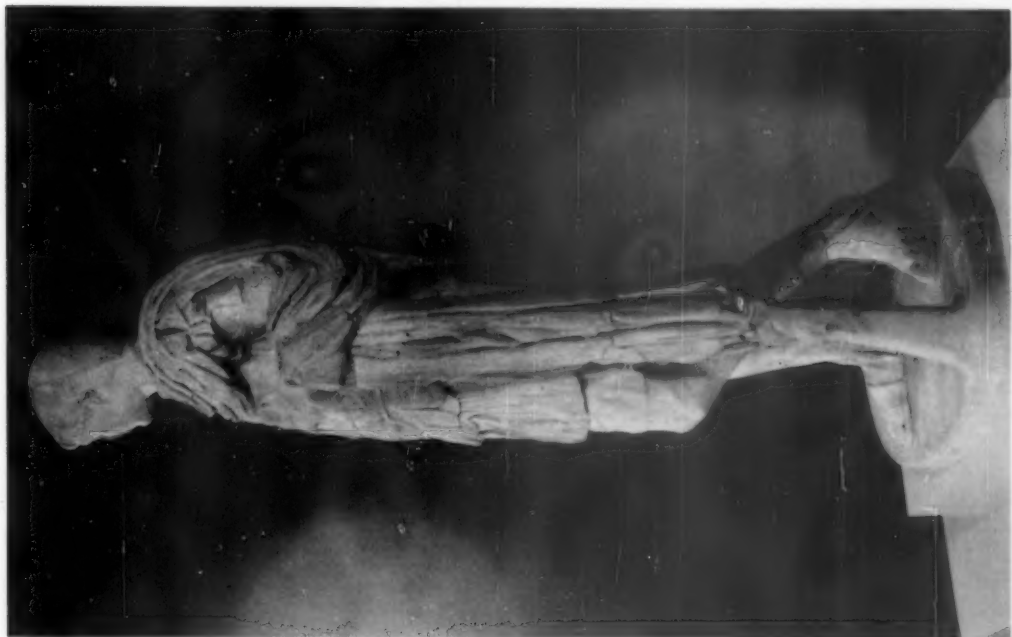


FIG. 4. Profile

Trajan. Fogg Museum

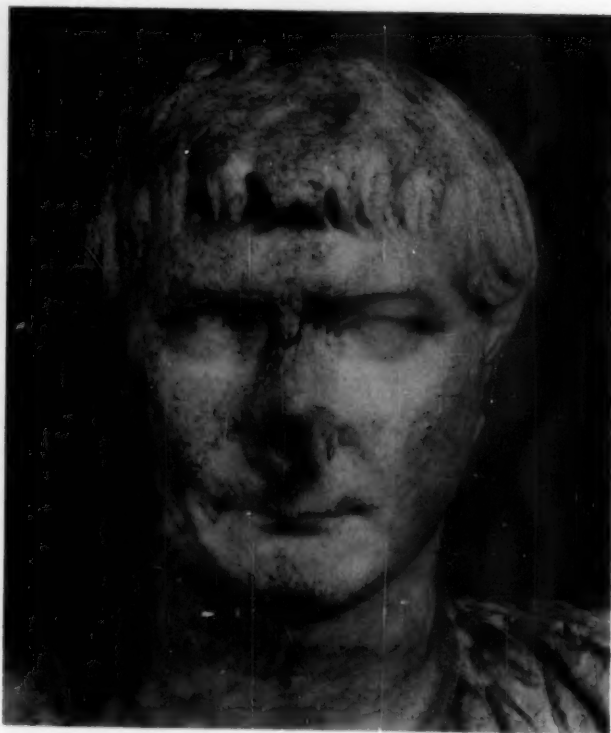


FIG. 5

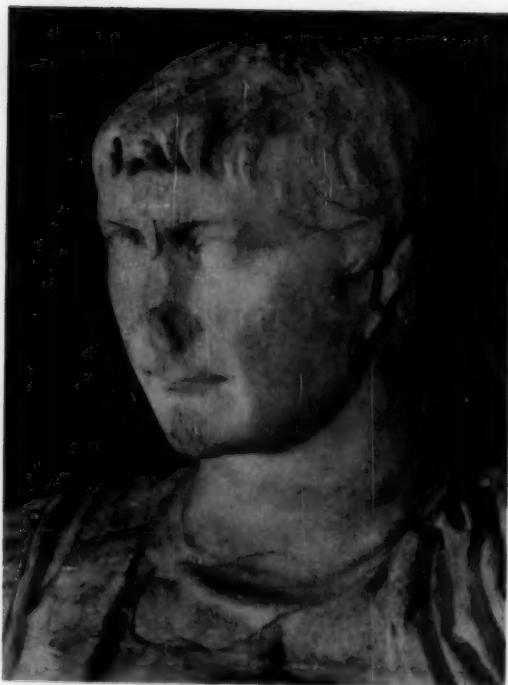


FIG. 6



FIG. 7

Head of Trajan. Fogg Museum



FIG. 8. Trajan. Fogg Museum. Detail of the cuirass



FIG. 12. Statue of Trajan. Copenhagen, Ny Carlsberg Glyptotek (photograph courtesy of the Director)



FIG. 10. Flavian cuirassed torso. Boston Museum of Fine Arts (photograph courtesy of the Museum)



FIG. 24. Roman second-century sarcophagus with bucrania and garlands on the lid. London, British Museum.



FIG. 16. Detail of breastplate of statue of Hadrian found at Cnossus



FIG. 13. Statue of Trajan. Leiden, Rijksmuseum (photograph courtesy of the Director)



FIG. 15. Statue of Hadrian. Athens, Agora (photograph courtesy of Agora Excavations)



FIG. 17. Statue of Hadrian from Hierapytna, Crete. Istanbul, Archaeological Museum (photograph Alinari no. 47009, from the Mostra Augustea cast)



FIG. 23. Principal panel of the Caffarelli Sarcophagus. Berlin

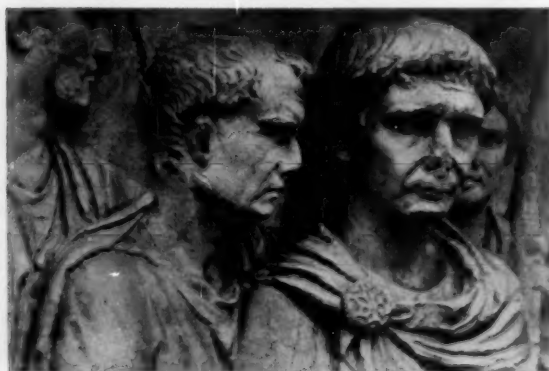


FIG. 11. Arch of Trajan at Beneventum, Campagna side of the Attic. Head of Trajan



FIG. 14. Statue of Trajan. Ostia (photograph courtesy Soprintendente, Scavi di Ostia)



FIG. 19. Statue with Julio-Claudian commemorative breastplate. Cherchel Museum



FIG. 21. Arimaspe fighting. Hellenistic-type marble bulls' heads on flaps. trophy found on Rhodes



FIG. 22. Antonine cuirassed torso with griffins. Guelma Museum



FIG. 18. Cuirassed statue with *Judaea Capta* breastplate. Sabratha Museum (photograph Archivio fotografico della Libia occidentale, Serie D. S. N. 207)



FIG. 20. Coins of Trajan. London, British Museum

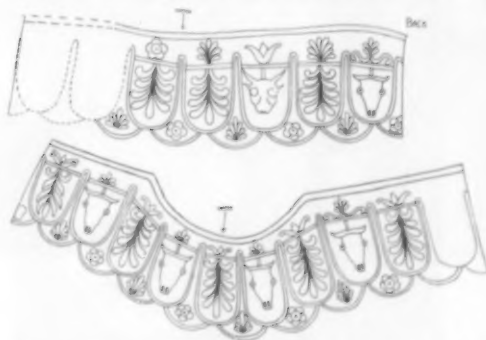


FIG. 9. Trajan. Fogg Museum. Reconstruction of design on the pteryges. Drawn by Regina Gittes



FIG. 25. Section of an Antonine triumphal relief. Rome, Museo Nazionale



FIG. 27. Kneeling eastern barbarians presenting standards to the Curia Julia Victory. Glass paste in the Berlin Collection



FIG. 29. Coin of Caligula, showing Germanicus (no. 1), and seven reverses of gold and silver of Augustus. London, British Museum

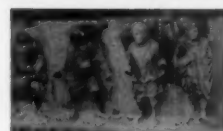
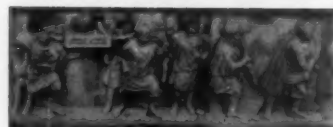
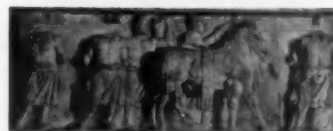
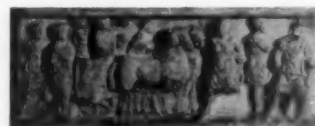


FIG. 26. Sections of small frieze of Arch of Trajan at Beneventum

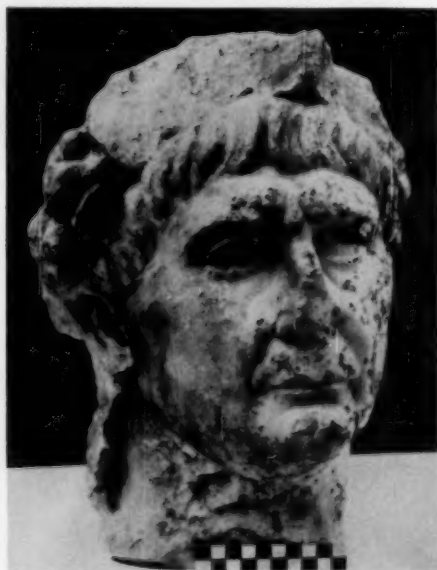


FIG. 30. Head of Trajan. Heraclion (Crete) Museum



FIG. 28. Terracotta plaque with eastern barbarians supporting a Gorgon shield. Hamburg, Gewerbemuseum

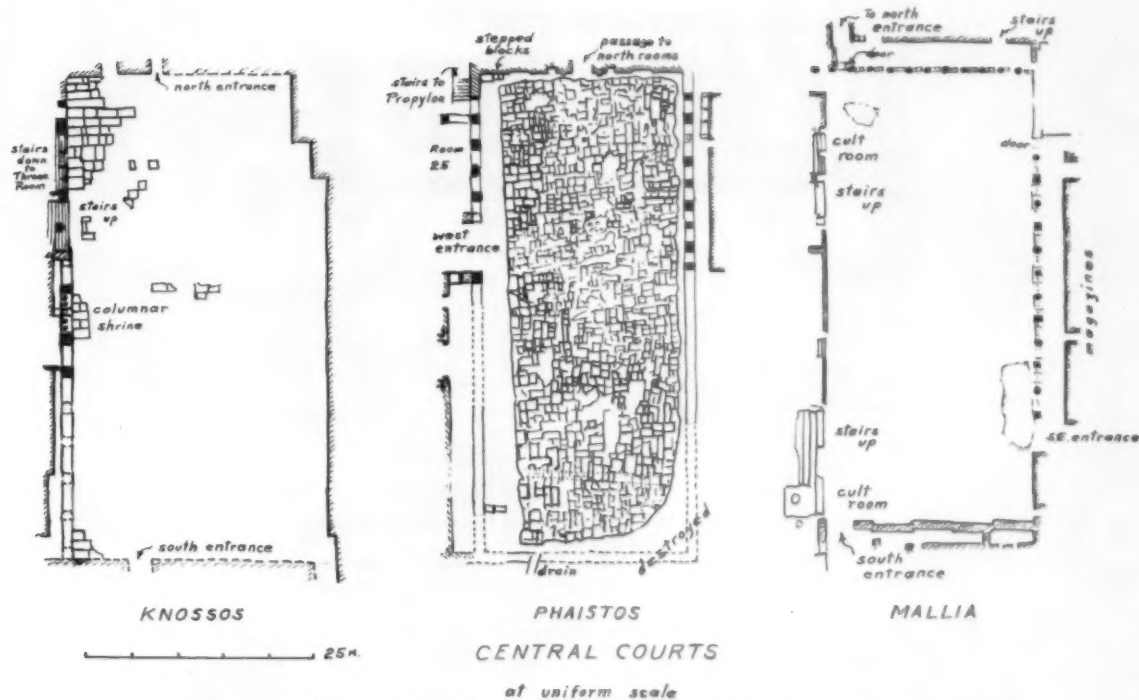


FIG. 1. Central Courts of Palaces of Knossos, Phaistos, and Mallia at the same scale

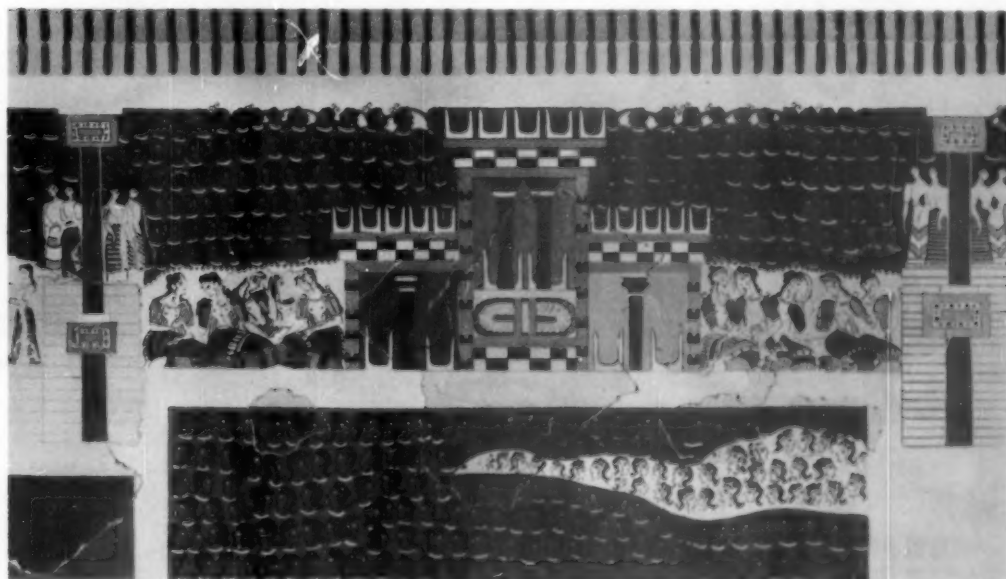


FIG. 2. The so-called Grandstand Fresco from Knossos
(from Evans, *Palace of Minos*, III)

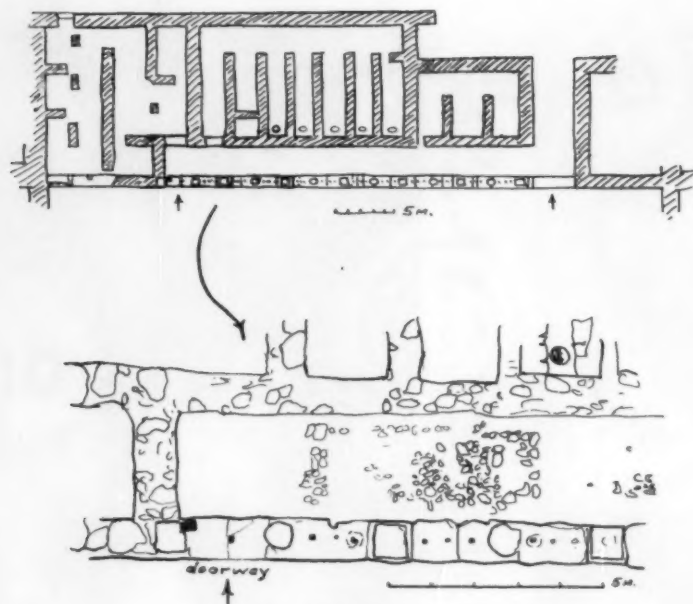


FIG. 4. Plan and detail of east portico,
Central Court of Palace at Mallia

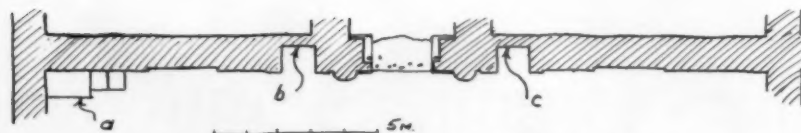


FIG. 8. Plan of north façade, Central Court at Phaistos

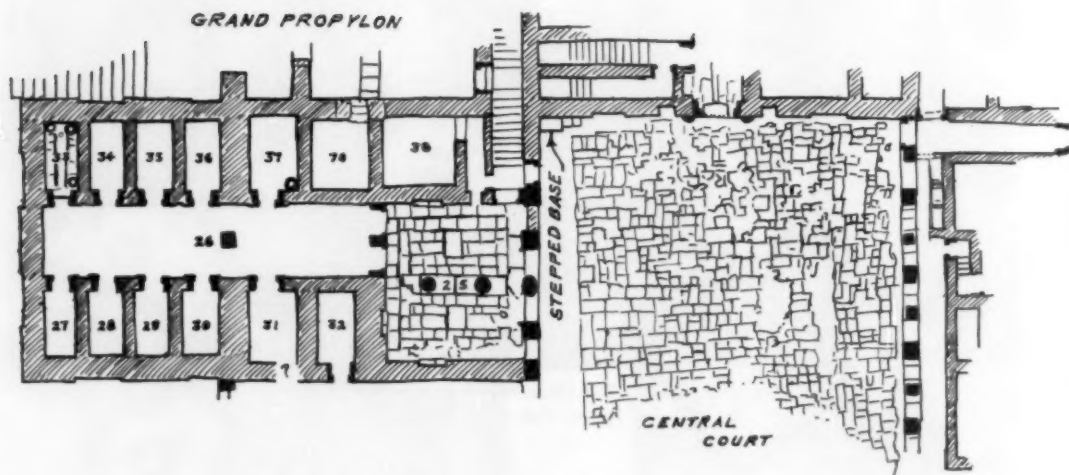


FIG. 7. Plan of central part of Palace at Phaistos

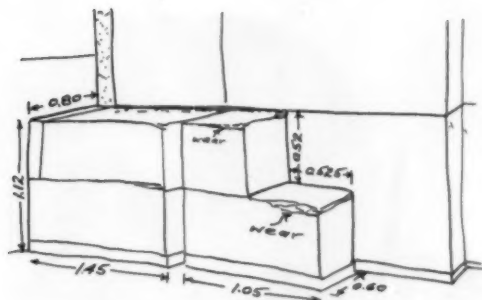


FIG. 11. Drawing of blocks in northwest corner of Central Court at Phaistos

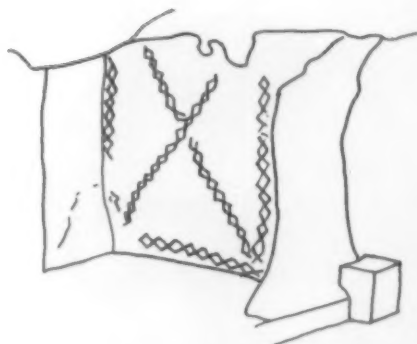


FIG. 13. Drawing of west niche of north façade, Central Court at Phaistos



FIG. 3. Drawing of Minoan gem said to have been found at Priene

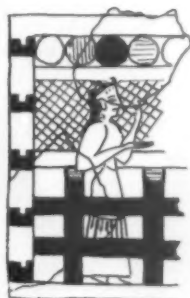


FIG. 5. Fragment of mural painting from Knossos



FIG. 12. Suggested use of blocks in northwest corner of Central Court at Phaistos

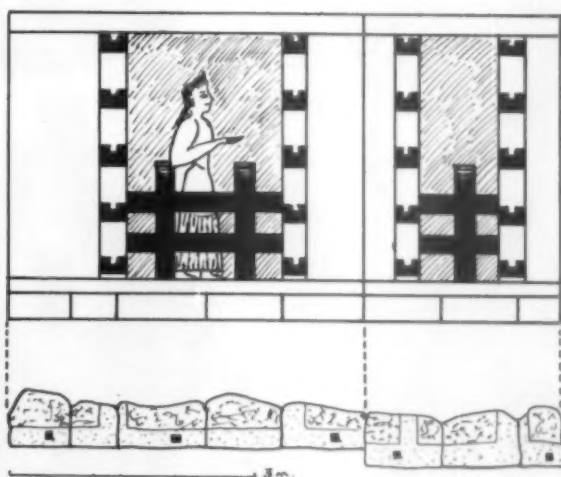


FIG. 6. Suggested restoration of south end, Central Court of Palace at Mallia



FIG. 9. Threshold of central door, north façade of Central Court at Phaistos, from south



FIG. 10. Blocks in northwest corner of Central Court at Phaistos, from southeast

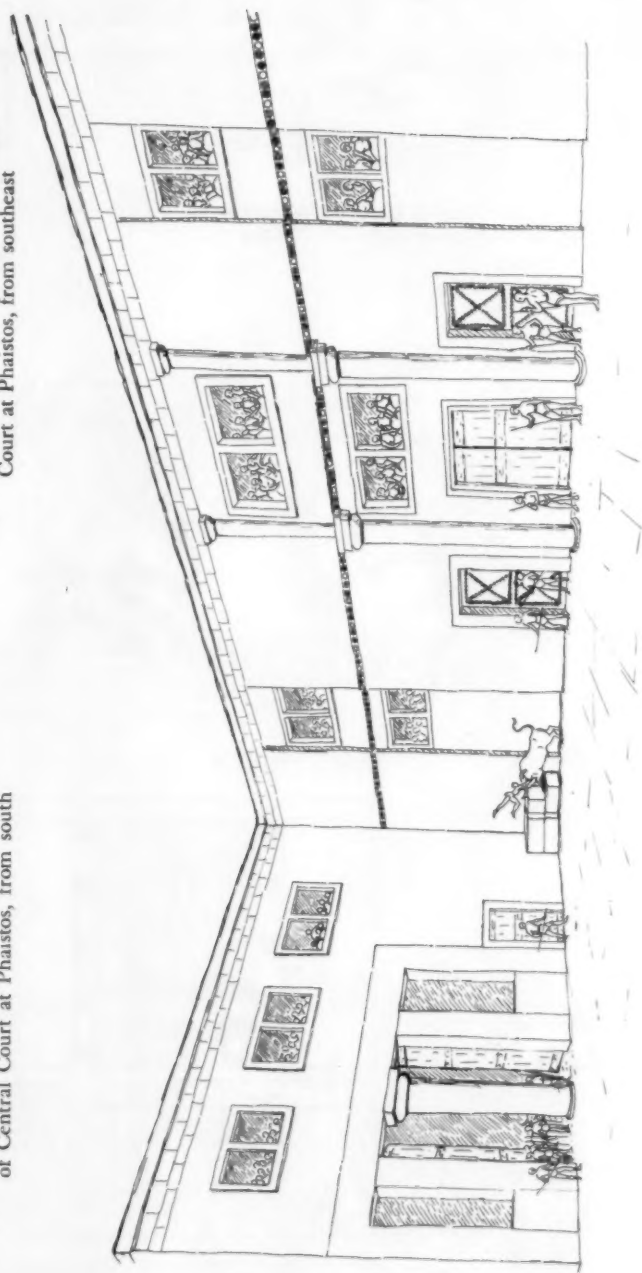


FIG. 14. Restoration of northwestern portion of Central Court at Phaistos during bull-games



1



15



2



16



3



17

FIG. 1. Chalcedony scaraboid. Female head. National Museum, Naples. FIG. 2. Tetradrachm of Syracuse, signed by Eumenes. British Museum. FIG. 3. Tetradrachm of Syracuse, signed by Euainetos. British Museum. FIG. 15. Carnelian ringstone. Boxer. Private collection. FIG. 16. Black jasper ringstone, Achilles (?). Metropolitan Museum. FIG. 17. Burnt chalcedony scaraboid. Victorious athlete. Ashmolean Museum. All figures enlarged.



5



8a



8



4



6



18



7



19

FIG. 4. Carnelian scaraboid. Heron. Private collection. FIG. 5. Chalcedony scaraboid. Heron. Private collection. FIG. 6. Burnt chalcedony scaraboid. Persian spearing a fox. Private collection. FIG. 7. Stater, probably of Asia Minor. Persian horseman. British Museum. FIG. 8. Scaraboid. Helmet-maker. Museum of Antiquities, Nikosia, Cyprus (photograph, Cyprus Museum). FIG. 8a. Burnt chalcedony scaraboid. National Museum, Athens (photograph by H. Vollenweider). FIG. 18. Sardonyx cameo. Aphrodite and Erotes. National Museum, Naples. FIG. 19. Sardonyx cameo. Aphrodite. Metropolitan Museum. All figures enlarged.



9



10



12



11



14



13

FIG. 9. Etruscan agate scarab. Herakles and a winged daemon. Museum, Parma. FIG. 10. Etruscan flat-backed sardonyx scaraboid. Herakles and a winged daemon. British Museum. FIG. 11. Etruscan agate scarab. Herakles on the pyre. British Museum. FIG. 12. Banded agate ringstone. Herakles and a winged daemon. Ashmolean Museum. FIG. 13. Amethyst ringstone. Amazon. Archaeological Museum, Florence. FIG. 14. Sard ringstone. The wooden horse of Troy. Archaeological Museum, Florence. All figures enlarged.



FIG. 1. Athens. Three terracotta statues



FIG. 2. Athens. Diomedes carrying off the Palladion



FIG. 3. Isthmus of Corinth. The Diolkos



FIG. 4. Samothrace. Columns of the Hieron re-erected



FIG. 5. Amyklai. Terracotta relief



FIG. 8. Eleusis. Vases from an Early Geometric grave



FIG. 7. Dodona. Bronze horse



FIG. 6. Athens. Early Helladic house foundations

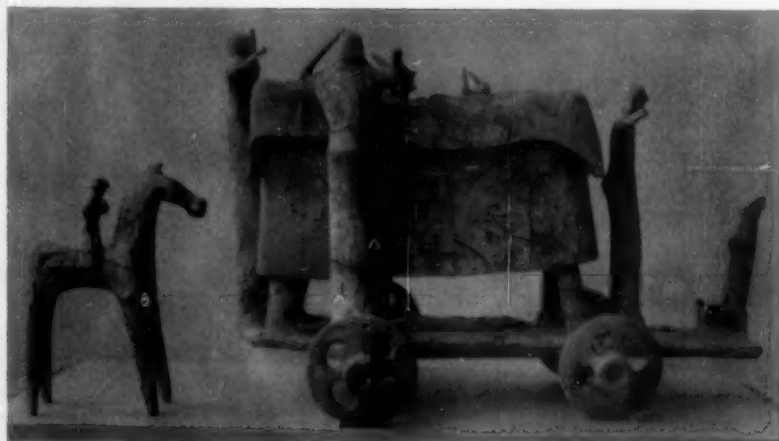


FIG. 9. Athens, from Vari. Terracotta funeral wagon



FIG. 10. Myrsinochori. Mycenaean dagger

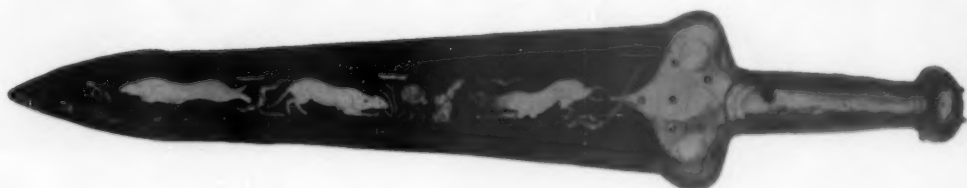


FIG. 11. Myrsinochori. Mycenaean dagger



FIG. 12. Myrsinochori. Casts of seal stones
Top: Mycenaean cylinder. Sardonyx
Second: "Oriental" cylinder. Sard.
Lower half: Five Mycenaean lentoid seals
Lower left: Solid gold bead-seal
with intaglio; capturing a bull.



FIG. 13. Myrsinochori. Ivory pyxis



FIG. 14. Palatitsa. Detail of mosaic pavement



FIG. 16. Palatitsa. Detail of mosaic pavement



FIG. 17. Giase-Ada. Grave stele



FIG. 15. Palatitsa. Restored drawing of mosaic pavement

Book Reviews, continued

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BIEBER, <i>The Sculpture of the Hellenistic Age</i> (Evelyn B. Harrison)	298
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AVAILABLE BACK NUMBERS

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